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**The Inland Architect's Eighth Year of Publication.**

The present number of THE INLAND ARCHITECT commences the eighth year of the journal's publication. It is not necessary to point to the estimation in which it is held by the architects and the builders throughout the United States and its reception as an exponent of American architecture by the profession in foreign countries, or the estimate of its value as an advertising medium evidenced by the thirty-six pages devoted to the current materials and appliances used in building, except to demonstrate that its success has been phenomenal; and our thanks to the profession that has so thoroughly encouraged and aided our efforts correspondingly great. For the coming year the quality and quantity both of illustrations and reading matter will be fully equal to that of the past year and improved upon as far as possible. The index to volumes XIII and XIV, which should appear in this number, will be published in the March edition.

**The N. A. B. Convention at St. Paul.**

The fourth annual convention of the National Association of Builders of the United States of America was held at St. Paul, Minnesota, on January 27, 28, 29. There were 119 delegates, representing thirty-three different cities and a membership of over 6,000. The proceedings, as in each of the previous conventions of this body, were characterized by parliamentary precision, well considered action and remarkable for the large number of weighty subjects discussed and intelligently disposed of. That much of this is due to the officers, and particularly to the secretary, is apparent, and though in his report the latter asks to be relieved of the great responsibility resting upon him, no amount of money or personal influence of members should be spared to retain that valuable officer. There may be a time in the future when his place can be filled without detriment to the association's interests, but we would warn the National Association of Builders that at present, among all the powerful minds that now aid in controlling and directing its affairs, there are none in whose hands it would be safe to leave the secretaryship. We say this from our knowledge of the material to be found within its membership, and of the needs of the association, a knowledge obtained through the closest possible relationship with the association since its organization.

**The Legal Feature of the Standard Contract.**

The report of the Uniform Contract Committee of the National Association of Builders should be read carefully by architects. It is not strange that the builders are more active in the establishment of such a contract than the architectural profession, for to them it is an emancipation from a class of complicated, if not thoroughly one-sided, contracts, the legality of which, in many instances, was open to serious conjecture. But to the architect it has proved invaluable, as a clear and concise statement of his position as arbitrator between contractor and owner, and to both as the establishment of a custom where there is no law it places the building interest upon a substantial legal basis equal to the enactment of a general law. There are other questions upon which the two national associations and their affiliated local bodies can work together to advantage. The trade school question belongs as much to architects as to builders, and the subject of lien laws is, in many portions of the

country, as interesting to the architect representing the owner, as to the builder. In regard to the latter, the chapters and the exchanges in the State of Missouri have already commenced to work together in the matter. Architects can profit by reading closely the proceedings of the late builders' convention, and the builder who really wishes to advance his interests will subscribe for an architectural journal and read it carefully from month to month, that he may keep in touch with all those things which, though pertaining to architecture, are so closely allied to his individual interests that it is a serious detriment not to be conversant with them.

Payment by the Hour Advised.

The position taken by the association upon the eight-hour question was such as to show beyond all other evidence how firmly the builders of the United States may trust their interests in its hands. The discussion of the question was necessary, but any position taken either for or against the system would have been most detrimental to the association's interests. On development of the fact that the tendency was toward the shortening of the hours of labor the association performed its natural function in advising its members to establish payment by the hour. It acted wisely, and members of the local bodies should read the discussion carefully and see that the opinion of the leading builders in all sections is in favor of this and the avoidance of all dispute with unions upon the number of hours in a day that each shall work. Contractors have too long taken up the cudgels of the public, and forgotten that they are practically the agents of the employé, with little interest in the number of hours he labors, so long as payment is made by the hour.

Should Mechanics' Lien Law be Abolished.

The discussion of the lien law developed the fact that while those who were laboring under one that was cumbersome, discriminating and unjust, as well as full of flaws from a legal standpoint and of no real protection to the contractor, as in Illinois, were in favor of the abolition of all lien laws, when a different law, more equitable and effective, was in force the members were in favor of retaining it. We are inclined to side with those who favor its abolition, because while one exists, good or bad, it is liable to change with each legislature. The argument of "why should a contractor be protected any more than a banker" is effective. Either the lien laws should be abolished in the several states and recourse be had to the common law, or else there should be a national law similar to that governing banking, which would be operative in all states and give equal justice to all interested.

The N. A. B. and the Trade School Question.

We fear that the matter of trade schools in the United States is not being taken hold of with sufficient seriousness by the members of the National Association, and still it is one of the vital questions of the day, the establishment of which should be aided by everyone connected with the building interest. It is a subject for each exchange to take up and to urge upon the educational authorities of their respective cities. It is one that the American Institute of Architects should join the National Association of Builders in discussing and promoting and in which they should work together with a common purpose and understanding. The local chapters should unite with the local exchanges, and all having for a grand object the establishment of trade schools as a part of the public school system.

The N. A. B. and the Arbitration Principle.

In commenting upon a recent dispatch from Boston, stating that a "financial alliance" was about to be formed by organized labor to establish a fund of a quarter of a million of dollars to support a proposed strike for the establishment of eight hours as a day's labor on May 1 next, the Chicago *Tribune* says:

> If this dispatch be correct, the workingmen as usual are only proposing to run head first against the natural order of things. What difference will the raising of this fund make if the employers cannot afford to hire the workmen on their terms? In that case they will simply shut up shop or go somewhere else. The workmen can't force the employers to do a losing business, and their $250,000 will soon be spent in idleness. If the employers can make a profit on the terms proposed by the workmen they will probably get their terms without having to spend this money, but if they insist upon terms that do not allow a profit to the employers it simply means idleness for the men, the loss of the means they can control, and the final acceptance of the employers' terms. They cannot force the employers to pay more than they can afford. In such cases there is only one course to pursue, and that is arbitration. The arbitrators hear both sides, and they will decide whether the employer can give more. If the business can afford more than he is paying he will yield, unless it leads to other demands, as being less costly than to stop. But when he can't see the profit, that ends the argument. The levy of a quarter of a million dollars upon those so little able to pay it is not a sign of much intelligence on the part of the leaders of the workingmen.

It is encouraging to see this influential daily supporting the action of the National Association of Builders in regard to this matter in thus recommending arbitration, and showing so clearly and conservatively the folly of further strikes among employés. The past, particularly among the building trades, should have taught this thoroughly, and how disastrous it is to listen to the professional agitator. In the last four years no strike of any magnitude by organized labor has been successful, while many have been settled to the mutual satisfaction of both employers and employed by calm discussion and arbitration. So thoroughly has labor been convinced of this (though in many cases previous to the time mentioned, it must be confessed, the argument was a knock-down one) that that once powerful body, the Knights of Labor, has almost disappeared. Only those organizations are now strong that are controlled by the most conservative and intelligent members, and who recognize the principle of arbitration and the unity of interest of the employer and the employé.

Death of Architect McArthur, of Philadelphia.

Architect John McArthur, Jr., well known throughout the United States as the architect of the City Hall at Philadelphia, died at that place, aged sixty-seven years. Mr. McArthur was born at Bladernock, in Wiltonshire, Scotland, and came to the United States ten years later. As an architect he first came into notice when, in 1848, he was awarded first premium for his plans for the House of Refuge at Philadelphia. During the war he acted as architect for the war department, and in this office erected many of the hospitals and other government buildings at Philadelphia and elsewhere. But it was in 1870 that the chief honor was bestowed upon his genius by the city of his adoption, when his design for the new City Hall was accepted over all competitors, the foundation stone of which was laid in 1874. Since this time Mr. McArthur has been employed upon the work at a salary of $10,000 a year, and though this, one of the grandest public buildings in the country, is not yet completed he has seen more than $14,000,000 expended in its erection, and it will stand as a monument to his architectural ability. Mr. John Ord has been elected to succeed Mr. McArthur, and complete a building that has been from its inception almost to its completion under one master mind, that leaves it as a memorial to a genius that rose above all obstacles and environments, leaving a name that will be a lasting honor to the profession he so long and honorably practiced.

## Romanesque Architecture.*

CHAPTER X.

CHURCH AND CLOISTER OF ST. TROPHIME AT ARLES — THE PORTALS OF ST. GILLES IN LANGUEDOC, OF ST. MARTHA AT TARASCON AND OF MOISSAC — CLOISTER OF MONTMAJOUR, NEAR ARLES, AND OF ST. PAUL-DEL-MAUSOLÉE, NEAR ST. RÉMI.

IN the southern countries of Europe, and principally in the South of France, Romanesque architecture assumed from its start a character of peculiar fineness and elegance which is easily explained. The fact that southern architects were born in the midst of the *chefs-d'œuvre* of Roman art which their ancestors had not only assimilated, but also which they had rapidly brought to a higher degree of perfection, explains it.

The Romanesque architects of Provence followed the uninterrupted traditions of antiquity, and, while sacrificing the architectural parts to the construction of the edifices erected in the eleventh and twelfth centuries in the southern provinces, they preserved ancient art in the refined taste for ornamentation and statuary, in the expression of which Syrian and Byzantine influence can easily be seen.

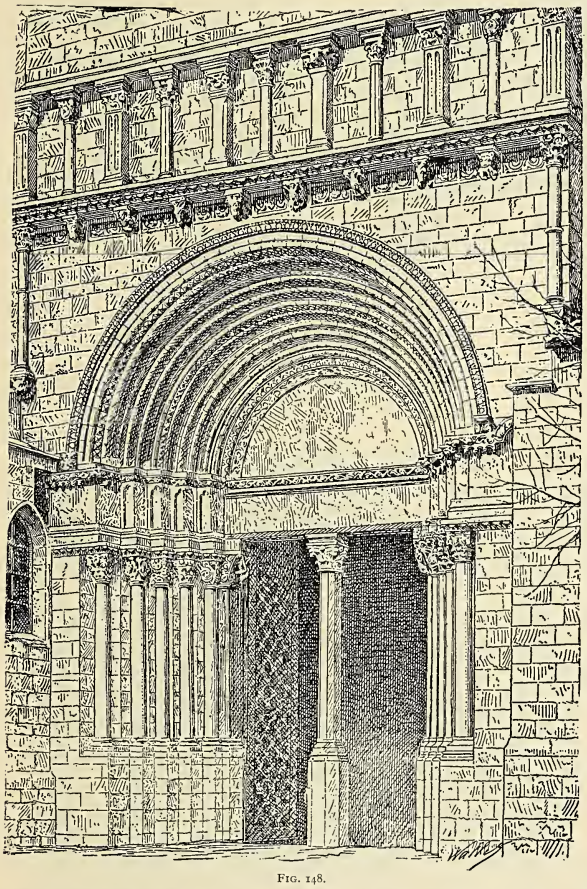


FIG. 148.

The church of St. Trophime, at Arles, is one of these examples, so numerous in Provence, of an edifice built at the commencement of the twelfth century according to the new principles of Romanesque construction. It is composed of a nave and two narrow side aisles, divided in five bays and separated by a transept from the sanctuary, formed of a great apse and two small apsides vaulted in quarter spheres.

The plan of St. Trophime recalls the antique basilicas by the arrangement of the nave, of the transept, and of the hemicycle, accompanied by two small apsides; but the edifice is Romanesque by its system of vaulting.

The vaulting of the nave is in the form of pointed arches, and the ribs of the arches of the side aisles are circular. The pointed arch of the nave is not characteristic of a style of architecture; it is only a means often employed by Romanesque architects in Central and Southern France, because the vaulting in the form of a pointed arch exercised on the lateral walls a much less energetic action than the circular barreled arch. Moreover, in St. Trophime, as in some other churches, the pointed and round arch is used simultaneously in the same edifice, according to the exigencies of the construction, to insure its perfect stability. (Fig. 145.)

The portal of St. Trophime is one of the most beautiful in Provence, as remarkable for the perfection of its construction as for the richness of its decoration. According to Viollet-Leduc the ornamentation has a Romanesque, Greek and Syriac character, and the statuary is Gallo-Roman, with a pronounced Byzantine influence.

The Romanesque cloister of St. Trophime is certainly one of the most curious in southern France, which contains many of this epoch, notably at Montmajour and at St. Rémi. Two galleries of this cloister date from the commencement of the thirteenth century. Each of these is composed of three principal bays, divided by four arcades carried on small twin columns. The pillars at the corners are very massive, as well as those which separate the bays.

This cloister is one of great richness as to its carvings; the small columns, capitals and facing of the piers are of gray marble, and in the carving as well as style of the columns the influence of antique Roman art can be seen.

The Abbey church of St. Gilles in Languedoc, the same as St. Trophime, reproduces in the details of its decoration the Roman fragments that were at that time found throughout France. The edifice is very interesting and its magnificent portal is one of the richest examples of Romanesque Byzantine ornamentation. According to Mérimée it is simply an immense bas relief of marble and stone, where the background disappears under a multitude of details. According to Violet-Leduc the school of Toulouse knew how to reconcile the Gallo-Romanesque and Auvergnate traditions with the Byzantine gifts collected in the East. Another neighboring school, that of Provence, initiated itself even more thoroughly in those last vestiges of Greco-Roman art, which took refuge in Syria. In examining the portals of St. Gilles, which date from the twelfth century, it seems as if they must be the remains of one of those monuments which sprang up in such numbers on the road from Antioch to Aleppo.

In this church is the screw of St. Gilles, a *chef-d'œuvre* of stereotomy, which gave its name to the rampant spiral vaulting. It was, moreover, the place of pilgrimages for companies of stone-cutters.

The portals of St. Martha at Tarascon (Fig. 148) are much less rich than those of St. Trophime and of St. Gilles, but in them the characteristics of Romanesque architecture of the twelfth century are perhaps more clearly shown. It is necessary always to state the marked antique reminiscences in the contour of the columns, the profiles, the carving, and still more in the false story above the doorway. This story is composed of pilasters alternating with small colonnettes, both fluted and extending between two slight cornices. The lower one is sustained by brackets, or, rather, carved corbels, the spaces behind which are filled by a frieze in the form of an engraved metope. These architectural members have preserved the appearance of even the motives that are so frequently found in the Roman edifices built in Provence during the first centuries.

Among the doors of the churches of the twelfth century, the most remarkable according to Violet-Leduc is that of Moissac. (Fig. 149.)

These doors open laterally on to a great porch; it is preceded by a grand nearly circular arch, which forms of itself an ante porch, and which is richly decorated with carvings of gray marble. The mullion of interlacing lions forms an ornamentation, whose Asiatic origin

* "L'Architecture Romane," by Edouard Corroyer, Paris. Translated and abridged from the French for THE INLAND ARCHITECT, by W. A. Otis, architect. Commenced Vol. XIII, No. 3.

is very marked; the carving, moreover, is extremely fine. Time has enriched it with an admirable patina, which gives to this singular composition, so original and decorative, the aspect of antique bronze.

The jambs are ornamented with crescents, and the lintel is decorated with beautiful tracery, deeply sunk. In the pediment is seated a great crowd of figures, representing Christ in the act of blessing.

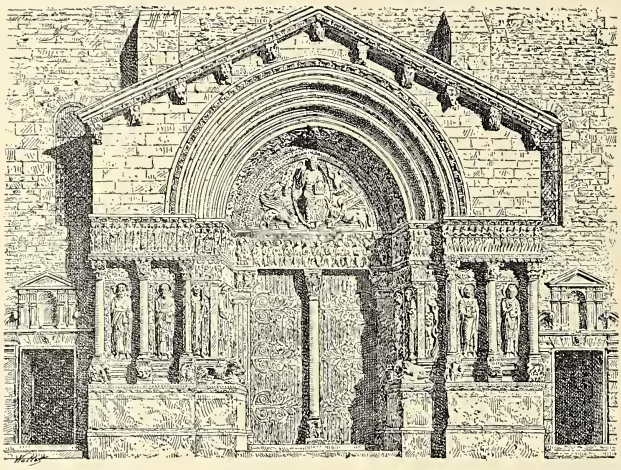


Fig. 145.

On each side are the four symbols of the evangelists, accompanied by two angels of colossal dimensions, and the twenty-four patriarchs of the Apocalypse. The voussoirs are decorated with finely sculptured ornaments. On the joints of the arch and in the lateral arcades bas reliefs in marble, of a very marked Byzantine style, represent at the right of Christ the Judgment of the Wicked, and at the left, the Annunciation, the Visitation, the Adoration of the Magi, and the Flight into Egypt.

The cloisters of the abbey of Montmajour (Figs. 151 and 152), and of St. Paul-du-Mausolée, near St. Rémi, are less ornamented than the cloister of St. Trophime, but they are very similar to it in their mode of construction adopted by the architects of Romanesque edifices.

The galleries of the cloisters of Montmajour and of St. Paul-du-Mausolée are both covered with barreled vaults, with arch ribs resting on the side aisles; this on the outer side of the cloister is very thick, and it is, beside, strengthened on the exterior by the counter-buttresses at right angles to the arch ribs. These arches are united exteriorly by segment arches, the openings of which are decorated by arcades resting on little twin columns.

## Chapter XI.

### church of st. mark's, at venice.

The construction of churches with cupolas was a most interesting phase in the revolution of the art of building, which began in the East in the sixth century and which was made manifest simultaneously in Italy and France at the commencement of the eleventh century by two admirable monuments, both *chefs-d'œuvre* of the Romanesque period of architecture. The churches erected at the end of the tenth century, and especially at the commencement of the eleventh century, are either partially or entirely vaulted, according to the new principles of Romanesque architecture. We have seen the efforts of builders to arrive at this result. However, the general arrangement remained about the same as that of the antique basilicas, with the exception of the round or polygonal churches, and even in edifices where the wisest and most ingenious combinations of the Romanesque style were to be found the basilica form was not departed from, a form which might almost be called consecrated. There is always the same central nave, accompanied by one or more side aisles and abutting into a transept into which it opens, while beyond is a principal hemicycle or grand apse, with two or more smaller apsides. These different parts of the edifice were covered with wood or stone, by open timber roofs or in circular, pointed, groined, barreled, or quarter-spherical vaults. It is the Latin form augmented by a greater or less number of accessory details, which do not change the general form. But by the adoption of the new system of which the cupola is the principal element, the churches were transformed, and if they yet kept some of the Latin details they became Byzantine in even the economy of construction. The plan of the edifice no longer recalls the Roman basilicas; it resembles that of the Holy Apostles built at Constantinople during the reign of Justinian.

The church of the Holy Apostles had the form of a Greek cross composed of two equal naves, of three bays each, crossing each other at right angles, and consequently forming five equal bays, crowned each by a hemispherical cupola, sustained by four pendentives. This is absolutely the description of the church of St. Mark's and that of St. Front which we shall study in the following chapter.

St. Mark was not constructed on the plan of St. Sophia of Constantinople, at least not the original church destroyed by fire in 976, which indicates that it was covered with an open timber roof like the antique basilicas.

The present church of St. Mark was commenced, according to historians and reliable archaeologists, in 1043 and roofed in 1071, but not finished, for they continued for centuries to enlarge and decorate it. It has the exact form of the church of the Holy Apostles. The construction of St. Mark indicates an advanced art. The intersecting naves are formed of heavy arches, united at the summit by pendentives, forming a solid course for the hemispherical cupola. The piers, receiving the spring of the arches, are hollowed out by the two-storied arcades and form

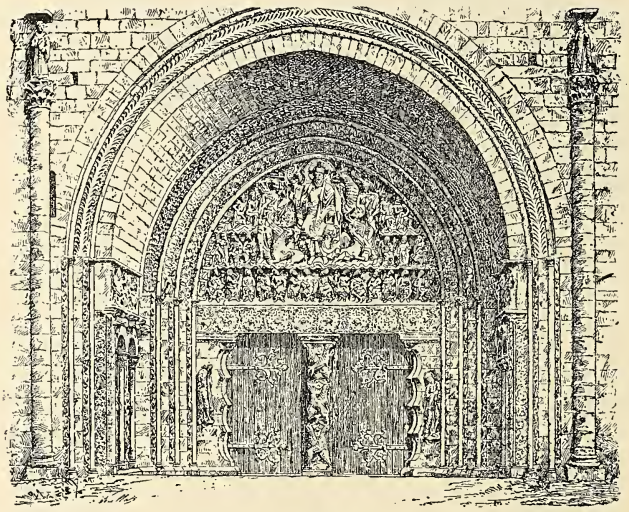


Fig. 149.

the side aisles, which establish easy communication at the side for the intersecting naves.

But if the plan and architectural part of the elevation are frankly Byzantine, the mode of construction remains Roman; the skeleton of the edifice was afterward clothed in a decoration which disguise the details of its construction. The details of the architecture are equally Roman; the bases, the profiles are all of antique character and the shafts of the columns as well as the capitals seem to have been taken from Greek monuments. (Fig. 153.) On the east a hemicycle or apse surrounded by smaller apsides, as in the church of the Holy

Sepulcher at Jerusalem, is accompanied by two apsides, smaller still, arranged in the same manner. These apsides and the two smaller ones form a sanctuary which recalls that of the Christian churches of Constantinople or of Greece, especially those of Theotocus and St Nicodemus.

At the west a porch with cupolas, less ancient than the church, extends across the façade, pierced by five doors, and extends along the sides until it meets northern and southern arms of the cross.

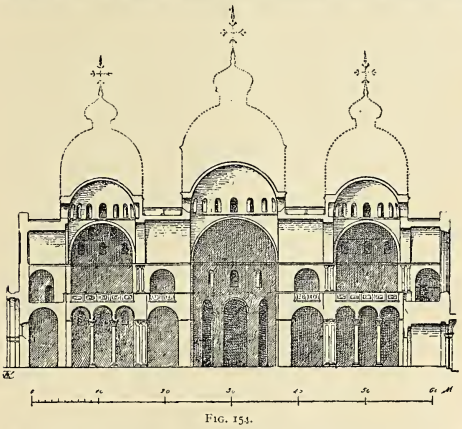


FIG. 153.

(Fig. 154.) The present dome replaced the covering of the primitive cupolas. The façades were restored in the fourteenth century, and the small towers with the intervening arches, and the ornaments in bad taste, which dishonor the venerable edifice, appear to be of this epoch.

*(To be continued.)*

## Development of Architectural Style.*

BY GOTTFRIED SEMPER — TRANSLATED AND ARRANGED BY JOHN W. ROOT, ARCHITECT.†

As regards India, we observe a building art whose style looks highly original, as though it were the result of the uncontrolled fantastic notions of the Hindoos, who were ready for self-sacrifice for the benefit of the community; but, although it indicates these qualities, this style is the coolly calculated work of statesmen, compared with whom even Macchiavelli seems to be a sentimental politician. To counteract the mighty powers of an enervating climate, and the peculiar mental and sensual development of the Hindoos, there were two opposite methods of establishing and maintaining a state. The doctrine of Buddha suggested one of these. It opposed those forces as absolutely pernicious factors, rejected the authority of the Vedas, the holy books of the Brahmins, and opened the gate of true knowledge for all mankind, without distinction of caste or race. It denied the superiority of the Brahmins and of the other preferred castes, and represented the principle of liberty and the right of individual existence. Architecturally, it is expressed by a style which is distinguished by its sobriety from the lavish styles of the worshipers of Brahma.

Buddhism, like Christianity, has a cosmopolitan tendency; it spread over the whole of eastern Asia, but could not endure the intoxicating sky of India. The Brahmins pursued the opposite method by attempting to keep within certain bounds and to systematically lead these invincible forces in a definite direction, thus making them harmless, and even transforming them into powerful factors in the state mechanism; that is, they advanced among the people the knowledge of the vanity of the individual, compared with natural life in general. They disdained the lever of personal ambition, a mighty agency in other states. The monumental expression of the state-principle followed by them is seen in many temples, pagodas, monasteries and pilgrims' harbors with their exuberant plant-like confused elaboration, partly constructed from stone, partly cut into the rock, and partly sunk into the ground. The service they perform is, we may say, but the pretext for such elaboration. Works of myriads of penitents and monks, glorified self-mortification, and at the same time mortification of the stone. Their baffling and seemingly law-defying abundance of forms, is controlled by rules, and every detail is prescribed in the holy books of the Silpasastra, the divine building law-book of the Brahmins. Without these books, therefore, the imagination of the Hindoo people would have remained sterile; and the amazing creations produced by their self-tormenting fanaticism are again triumphal monuments of sagacious statesmanship.

In prehistoric times society in Egypt was probably also of warlike constitution, as the oldest architecture indicates. This seems, at least, to be shown by the pyramids so closely related to Asia's terrace towers, and by our knowledge of other buildings and of the constitution of the old empire. But long security against external attacks may have given the community time to adapt itself to the ground, and to grow fast in it. The idea of autochthony was strong among the Egyptian people. It became the foundation of the ruling system of a country aristocracy, which, with theocratic forms, governed Egypt for centuries.

The house of a hereditary owner grows with his possessions, and developes slowly, like a plant from the sprout. The larger is an extension and completion of the smaller; and the latter the reduction of the former, as we have seen the case to be in Asia. This contrast is symbolized in the Egyptian temple-palace of the new empire, for those great national monuments of Thebes were both temples and royal palaces as well. Its essential features appear clearly defined when compared with the Asiatic defiance structure. The largest monuments of Thebes, the celebrated temples at Kamak and Luxor, and that row of palace-temples located near by, on the west side of the Nile, are all distinguished from the very smallest structures merely by the multiplication and extension of their outworks, and by the greater number of covered parts in the inner court. The temple-cell, forming the essential part of the whole, changes neither size nor form, but is gradually veiled and outshone by the outworks, which constantly increase in number and proportions. There is no leaning against a prominent point of support as in Chaldea, but, on the contrary, the center of gravity of the whole is in the outworks, which dominate the rest of the structure, without, however, forming a definite terminus to it. In fact, the continual increase from rear to front of the proportions of similar parts of the structure, invites the imagination to indefinitely continue this progression. Miles of sphinxed avenues, pierced by separated pylons, indicate how it might be extended. This quality, again, is opposed to the self-secluded Chaldean building, which is finished once and forever. It is true that several temples still exist, which naturally originated by gradual extension; but the symbolic meaning of the motive was early conceived and knowingly fixed by art. All the later ornaments, and even some very old ones, were manifestly created, and, so to speak, cast in one piece, according to this canon.

Thus, these simply divided masses seem to have grown out of the ground like the sandstone banks that inclose and pierce the valley of the Nile. Everything in the structure points to an invisible nucleus — to a kind of queen bee, whose influence is shown through the growing number of believers and pilgrims, through the addition of larger and grander apartments and forms; much of it being a glorification of the mighty priests rather than of the god created and maintained by them. It is not the house of the god, but his apparatus of culture that forms the essential and visible feature of the Pharaonic temple plant.

Founded for eternity, this stated form really prevailed for millenia until its last hour arrived. It was shaken at an early time, when, toward the close of the eighteenth dynasty, a king, Amenhotys III, strove to introduce sun worship instead of the old polytheism. Much later (seventh century A. D.), the old theocratic royalty was supplanted by a federative constitution, which found its remarkable architectural expression in the celebrated labyrinth, a structure similar to the above mentioned state's palace of the imperial reformer of China. Arranged around three sides of an immense square colonnade court there were twelve confederated palaces, each one having its equipment of pylons, foreyards, hypostyled halls and other apartments; the entire plant again inclosed and united by an outer peribolos. The fourth side of the court was occupied by a pyramid from an earlier period. Here, consequently, prevails a more Asiatic centralization idea, and a subordination to a monument, which reminds us, not without intention on the part of its founders, of earlier conditions of culture. But this interruption of

* Commenced in Volume XIV, No. 7.

† Material assistance to Mr. Root in this translation by Mr. Fritz Wagner, of Chicago, is courteously acknowledged in the following letter:

*Editors Inland Architect*,—In your publication of Professor Semper's essay, I alone am credited with the translation. No one well acquainted with my linguistic accomplishments will believe any such statement. The fact is, that but for the assistance of my friend, Mr. Fritz Wagner, the translation would never have seen the light. J. W. ROOT.

the old priestly regimen was of but short duration; the latter preserved itself under Persian, Greek and Roman sovereignty, up to the first centuries of the Christian era.

All examples cited so far show the arts while in the service of society or of those who controlled its fate. They were, therefore, not liberal (free) arts. In the former, emancipation could result only from a fortunate reaction of the awakened individual instinct against the instinct of submission to the ruling tutors of the community.

Ancient art invented the architectural symbol for this thought of liberation also. The Chaldean Belus temple as well as the Pharaonic pilgrimage temple contains an intellectual relation center. But in the former it is subdued by the massive substructure, while in the latter case it is hidden behind endless foreworks. The free Greek people, who themselves became priest and monarch, sough their own symbol in the visible subordination of both to the authority of the temple. In the pterepteric column-house, which rests upon a moderate step-structure of its own, splendor overtowers and controls the sanctified domain of the altar, and its inclosing walls and propylæa.

The substructure, the surrounding stoas, are now merely the preparing and supporting agencies, the court of the god, so to speak. God is no longer kept imprisoned in a concealed cage by cunning priests, neither does he serve wanton despots as the symbol of their strength; he serves nobody; he carries his own colors, representing his own perfection and Greek humanity deified in him.

*(To be continued.)*

## The National Importance of the Industral Education of the Youth of the Country.*

BY RICHARD DEEVES, OF NEW YORK.

"IN the sweat of thy face shalt thou eat bread till thou return unto the ground," is the unrepealed fiat of the Creator of both man and matter. Still man is endowed with powers which, when cultured, crown him the monarch over matter. Whether it be evidenced by the bones of wild beasts found with his skeleton in the caves of prehistoric man, by the earth mounds on our own plains, by the pyramids and temples of the Nile, by the ruins of Nineveh, Babylon, Carthage, Greece and Rome; or by the still standing monuments of medieval architecture, or by the works of the architect and builder of the present day, by the railroad, the steamship or the telegraph, we have the accumulated proof that man was not intended by his Creator to remain in a state of quiescence, lazily feeding on the ambrosial fruits of the gods, and thus thinking to enjoy perpetual youth; but it was from the first intended that he should be a force in the world, promoting its advancement and improvement.

In the divine economy there does not appear to be any place provided for the drone. From the days of Adam it has been the natural ambition of man to seek knowledge and better his condition, hence the evolution from the cave to the tent, to the cabin, to the mansion. As man advanced in civilization and intelligence, his wants have proportionately increased, and greater skill has been demanded to meet them. Human genius from the earliest times has been devising something new to meet these advanced requirements, and man's cultured skill has kept pace with the demands. The initial thing of its kind may have been rude in construction, but when skill has repeatedly been applied the perfected thing has been brought forth. Thus the steam engine of today is the perfected original of a Watt; the mighty steamers which now plough our broad Atlantic had their germ in the canoe of the earliest fisherman, and thus the demands for increased skill are constant and imperative.

As nations have advanced in civilization their progress has been well defined by the evidences left behind them of the skill of their people, and where these evidences are lacking we may conclude that there has been little or no advancement. The sun-dried bricks found in the ruins of Nimrod are positive proof to the explorer that the civilization of the people of those ages was not equal to the civilization of the people of the time of the building of the temples of Thebes or Karnak. In the ruins of Greece and Rome we find that the evidences of their advancement far exceeds those of the ages in which the temples of Karnak and Thebes were erected. As the conception and workmanship of the Venus of Milo surpass the conception and sculpturing found in any of the ruins of Assyria, so the civilization of the respective ages already mentioned. As we come down the centuries those nations which have left the most marked impress on the world's history, such as Phoenicia, Greece and Rome, afford convincing proofs of the fostering care with which they nurtured the arts and sciences and mechanics, thus accounting for the strength and influence they left behind.

In contrast with the above, the lack of skilled artisans was one of the great weaknesses of the Jewish nation. In the zenith of its glory and prosperity, during the reigns of David and Solomon, its Phoenician neighbor furnished the skill for the building of the temple and for constructing her ships, and also provided the seamen to man them. From the Exodus to the death of Solomon, a period of about five hundred years, the Jewish nation gave little evidence of mechanical skill, but, on the contrary, evinced a great lack of it. Even their old trade of brickmaking appears to have been left behind them in Egypt. After the death of Solomon, when the nation became divided through dissensions, it lacked internal strength and gradually declined until they were taken captive by their more enterprising Babylonian neighbors.

For a nation to be strong and prosperous its people must have and cultivate a diversity of pursuits. It will not do for all to be farmers, neither will it answer to have the majority in the professions. A few may be merchants, doctors or learned educators, but the great mass, from the necessities of the case, must be toilers on the farm, in the workshop, the building, or on the ship plowing the mighty deep. In a nation's industrial economy each person has a place to fill, and his right to fill such place should be held sacred and inviolate and protected by the might of its people. Especially should this right be jealously guarded in this land of constitutional liberty.

The history of the world goes to prove that the nation whose people have the greatest amount of freedom consistent with law and order and individual rights, and which seeks the development of its resources, is the strongest, and that her citizens are the most contented and prosperous. The experience of our own country during the late war, and since, has shown what a nation can do when it turns its attention to the development of its various resources. Instead of being weakened by it, the late war has made of us the strongest nation on the earth. Shut off from the markets and shops of the Old World, we were forced to go into the mines and manufactories, and the stern school of necessity has made us stand today the most enterprising and prosperous of people. There is no nation in existence whose resources of all kinds are more ample, nor is there a nation which has greater reason to be proud of her mechanical skill than these United States. And it should be our highest ambition to further develop these resources, encourage our mechanical genius and skill, and perpetuate our free institutions.

But the nation, in order to keep up with the genius of the age, must go forward. To stand still is to go backward. Any steps taken to restrict the development of our capacity for further improvement is a serious menace to our advancement. The nation, in order to keep pace with its advanced civilization, will have to depend very largely on the skill and number of its artisans, and any attempt at the restrictions of her citizens in their industrial development or pursuits is a blow aimed at its prosperity and very life, and should not be tolerated. Not only is it a blow aimed at the life of the nation, but it is antagonistic to the liberty guaranteed us by the national constitution. The Declaration of Independence recites "that all men are created free* and equal, and endowed with certain inalienable rights, such as life, liberty and the pursuit of happiness," but if the individual be restricted in his development or pursuits the Declaration of Independence becomes meaningless. The liberty of the citizen in all his honest pursuits or vocations should be beyond the power of any faction or cabal to prohibit.

Today all over this land there is a loud outcry against trusts, and I shall make no effort to defend them as I believe they are injurious to the best interests of the nation, but the labor trusts, which receive the least denunciation, are the worst, because they are the most despotic, unreasonable and injurious. They strike at the liberty of the individual, and from their inception are foreign to our institutions, and are led and controlled today by men who have no regard for our laws. The trusts formed by combined capital are sometimes beneficial in the reduction of prices through large combinations of capital, and the consumer pays less for the article, but the trusts formed by labor, which would restrict the particular trade or craft to a favored few, does injury to the many and fails to bring the benefit to themselves which they seek. The old motto, "Competition is the life of trade," has been productive of great good to this nation, as it has stirred men's minds and ambitions to such activity that we stand concededly foremost in both inventive genius and resources. As a proof of this, if you should make a tour of the Old World, wherever you go you would find evidences of Yankee genius. You might make a trip to the Land of the Midnight Sun, and in traveling by rail over the mountains you will probably find the train in which you ride drawn by a Yankee engine. Should you travel over old England you can ride in a Pullman palace car or sleeper, and in looking out of its windows you would probably see a Yankee mowing or reaping machine at work on its fields. In the large cities, if you wish to be shaved and drop into a barber-shop you will, if a first-class shop, perhaps drop into a Yankee barber-chair, and those who keep them advertise the fact in order to draw patronage. All the world over can be heard the hum of the Yankee sewing machine, and Yankee petroleum furnishes light to the Bedouin Arab of the East, or the fellaheen of the land of the Pharaohs. Lately, when an electrical exposition was proposed by the present emperor of Germany, to be held in Berlin, he was told that the United States were so far ahead in electrical genius and appliances that it had better be postponed till Germany could make a better showing, and in consequence it has been postponed till 1892.

When the arts, sciences, mechanics and the prosperity of the people have been so conserved under the liberties purchased for us by the blood of the martyrs of the Revolution, can the nation afford to have its citizens deprived of their inalienable rights of life, liberty and the pursuit of happiness? These treasures have been too dearly purchased for us to surrender them at the dictation of any clique or faction. It is a very dangerous precedent for the nation to allow any of our laws to be set aside or to become a dead letter. It is better if we have outgrown them to have them repealed in the proper way, but not at the dictation of a clique or as class legislation. To allow any man or body of men to set themselves above the law, and, by their conduct,

* Paper read at the fourth annual convention of the National Association of Builders, at St. Paul, January 29, 1890.

* This is a very common error. The Declaration does not say "free," yet the author bases much of the argument on that word.—ED.

show their contempt for the same, is but paving the way to anarchy. There are no laws on our statute books but will bear unequally on some, but living in large communities and under the established laws of civilization the few have to give way for the good of the many. As well might the fishermen of Galilee have said to Zebedee, "Thou shalt not teach thy sons to pull the oar or handle the net," or to the Indian that he shall not teach his boy to draw the bow or follow in the chase, as to say to an American youth that he shall not learn some industry whereby he can honestly earn his bread. By what right under this free American government does any clique or association of men usurp such arbitrary power? How long would our nation last as a free country if such usurpations were allowed to continue and grow? The tender mercies of the Pharaoh of the Exodus were more beneficent when he ordered all the male children of the Hebrews, as they increased so fast, to be put to death. Those poor innocents never knew what suffering meant. But to allow an American boy to grow up in idleness, preventing him from learning some craft or from following some calling whereby he can be a benefit to himself in being able to make an honest living and becoming a valuable citizen, is inconsistent with the nature of our institutions, and is antagonistic to our laws. It is the more merciful of the two evils and less cruel to follow the example of Pharaoh or Herod and put the children to death at birth than to allow them to grow up and keep them in idleness.

What would be thought by the people of this nation, or how long would they tolerate it, if all the farmers of the country were to combine and agree, in order to keep up prices and that they could live more at ease, to create an artificial scarcity by cultivating only a portion of the soil, or if the owners of the coal and iron mines of the country were to do the same, and cause a scarcity of their products and thus raise the prices on the consumers? Would not the people and the nation have the right, for self-protection, to put a stop to such conspiracies and punish the conspirators? Yet we are allowing this very thing to take place in the labor industries of the country, and we raise but a very weak voice against it.

Suppose we should permit this restriction on the freedom of American youth to choose his occupation in life to prevail. Would the demands of these socialistic propagandists stop here? Every intelligent person who hears me will answer no. Surrender your rights to the lawless and you will be left without law. Where is our boasted freedom if any clique or secret organization foreign to our institutions can deprive our youth from learning a trade or calling? Is it not the duty of the nation to protect her citizens in their rights in this respect, and severely punish those who would rob them. If such intolerable tyranny were allowed these same propagandists would also deprive us of every other right we possess if these rights interfered with their selfish ends. With the cry of liberty on their lips, a word so sacred to every American heart, the leaders in all those movements of socialistic and anarchistic tendencies would set all laws at defiance, and substitute license for liberty, and that only for themselves. The word is profaned when coming forth from the lips of anarchists. When the great Patrick Henry uttered the now immortal words, "give me liberty or give me death," he had no idea of the word liberty being used as a synonym for license

If we look back to the time of the French Revolution, during the reign of terror, we will find that the prototypes of our modern socialists and anarchists under the keynote of the revolution, liberty, equality, fraternity, caused the streets of Paris to be drenched with the blood of its best citizens. With this cry of liberty on their lips they tried to exterminate each other. With "equality" for their motto they proclaimed that all should eat black bread, and any person found in possession of any other gave cause for imprisonment and possibly the guillotine. Some of the darkest crimes in the world's history were committed by those mobs while excitedly shouting the memorable words, "liberty, equality, fraternity." Madame Roland, one of the victims of the reign of terror, immediately preceding her death by the guillotine, uttered these words, "O liberty, what crimes are committed in thy name." Some who hear me may say, "Oh, this state of things is never likely to exist in this enlightened age, and under our laws it could make no headway in this land," but stop and think a moment. It is but a few years since we heard of socialism for the first time in this country, and people laughed and regarded those who paraded and professed such doctrine as harmless cranks, but we have since learned that it was but a short step from harmless socialism to red-handed anarchy. Chicago will bear testimony to the fact that were it not for the bravery of a handful of its faithful guardians it would have been for the second time in our decade reduced to ashes, and its best citizens slaughtered. We in this country have no idea of the terror a few desperate persons can wield. The historians of the French Revolution tell us that at the worst period of the reign of terror there were not more than five hundred so-called leaders; these terrorized others, and Ishmael-like soon every man's hand was against his fellow. The nation today is a unit on this point that we do not want the principles of the French Revolution or the commune or any other of the blighting isms whose seeds have taken root on the other side of the Atlantic, disseminated or put in practice in this free land. We have many broad acres left but we should give this class of criminal emigrants to understand that we have no room left for them.

With our immense population of more than sixty millions of people, there are less persons learning trades today than there were twenty-five years ago. Cut off our foreign supply of mechanics today, and not increase the number of apprentices, and before many years the nation would be robbed of the means of material advancement. As a proof of this within the last year the stonecutters' unions passed a resolution shutting out the stonecutters called "birds of passage," who come over here from Europe in the spring, working here all summer and fall for good wages, and when the winter sets in go back to their homes, taking the money they have saved with them to be left on the other side, and repeat the same thing year after year; and as a consequence of shutting out so large a number there was a great scarcity of good stonecutters in our large cities and the progress of building greatly delayed. With this policy of the unions I am in full sympathy if at the same time they will remove the restrictions placed on the industrial education of our youth. The plasterers are now very largely dependent on the foreign supply, and are becoming so scarce that in the busy season they can demand almost any wages. This certainly is not a healthy state of things for the nation and people when we cannot either educate mechanics or import them.

Not only are the rules of trades' unions and Knights of Labor socialistic and anarchistic in their tendency, but in most cases are a violation of our rights under the constitution, but are unlawful, and if the law were properly enforced those persons who attempt to force these unlawful rules upon us would be severely punished. Take the law of boycott, for instance. Has there ever been such another act of tyranny or cruelty devised? Yet, the people of this nation have not yet waked up to its enormity. There is enough law in our land today to punish all violators of rights, but the trouble is there is too little justice meted out to those who set the laws at defiance. If an appeal were taken to our United States courts, I think, they would decide that all such combinations, having for their main object the interference with and restrictions of the rights of others, are conspiracies, and should be punished. But if our present laws do not reach this class of criminals the sooner we have such laws on our statute books, and their rigid enforcement, the better for the prosperity of the nation and its people. But will our legislators dare to take up such subjects when they know that they are inimical to the voters who belong to those various unions? I fear there are few who have the moral and political courage to do so. But they are ever ready to propose legislation to gain popularity by hampering capital and thrift, showing by such acts either their socialistic tendencies or their cowardice.

While traveling on a train over one of our middle states last summer I became engaged in conversation with a former legislator of that state, and who was then seeking reëlection, on the question of the hindrances placed in the path of our American youth who desired to learn the trades, and although expressing himself as being opposed to any hindrance being placed in his way and considering it very wrong, yet he gave me to understand, when I put the question to him direct, that he would not dare to offer any bill that would antagonize trades unions or Knights of Labor, but would be willing to support a bill preventing these unions or their members from interfering with a youth desiring to learn a trade, if some other member introduced it. This does not look much like honest belief in our boasted American independence. Herein lies one of the great dangers to the future well-being of our republic in the existence of the truckling politician who is ready to be all things to all men that he may win votes and retain political power and patronage, and whose oath of office is a dead letter, ignored as soon as taken. There is not a spark of patriotism in the average political demagogue, and the youth of the nation need have little hope through him. His best hope is through an enlightened public sentiment, created by just such persons and organizations as are represented here today.

It is believed by almost every intelligent person that all should be taught to read and write, and have sufficient education to fit themselves for the responsibilities of American citizenship, and in response to that feeling we have compulsory laws on education in many of our states, and I am glad the feeling in favor of such laws is growing stronger, and I trust the time is not far distant when all our states will enact and enforce compulsory educational laws, and that there will be none in this broad land who will not know at least how to read and write. For the safety and preservation of the nation it is an absolute necessity that the great boon of the right of suffrage should have intelligence and education to direct the citizens in its discharge. It is also equally important that the state or nation should look after the industrial education of its people, when, as I have before shown, that its life and prosperity so largely depends upon it. The nation could not exist if all were scholars and no toilers. Of what use, in nine cases out of ten, would a book education be unless the youth of the country were given an opportunity to apply it in some industrial pursuit? An education is a very dangerous possession to those who have no vocation in life. Charles Sumner said, "Education without occupation is peril; education with occupation is power."

The youth of the nation must be taught in some way how to apply himself in the various industries of the country, and if he cannot be taught in sufficient numbers in the shops or at the building, then there must be provided an addition to every prominent educational institution of the land for the purpose of teaching some handicraft.

While in the train reading a paper I came across a speech by Colonel Ingersoll, and while differing in theology, I am in hearty sympathy with the following speech on useful education: "The object of all education should be to increase the usefulness of man. Every human being should be taught that his first duty is to take care of himself, and that to be self-respecting he must be self-supporting. To live on the labor of others, either by force which enslaves, or by cunning which robs, or by borrowing or begging, is wholly dishonorable. Every man should be taught some useful art. This would give a feeling of independence, which is the firmest foundation of honor, of character. Every man, knowing that he is useful, admires himself. In all the schools children should be taught to work in wood and iron, to understand the construction and use of machinery, to become acquainted with the great forces that man is using to do his work. The present system of education teaches names, not things. It is as if we should spend years in learning the names of cards without playing a game. The more real education the less crime, and the more homes the fewer prisons." The highest honors of the nation should

be given to the noble philanthropist, Mr. Auchmuty, who has set the example in this respect. And I am glad to know that there are other noble men following the example he has set. But these schools are not the equal of the shops or building, for the practical education of these young men. It is a step in the right direction, and if our laws were properly enforced, so that the youth, after securing a technical knowledge, in addition to what they have been able to learn of the trade would be allowed to go to work in the shop or on the building, the end of the next generation would see a vastly improved class of mechanics.

I am ready to concede the right of every man, and consider it his duty to better his condition so long as he does not interfere with the rights of others ; but for any man, or body of men, to set our laws in defiance, and endeavor to trample on the rights of others, our laws cannot be made too rigid, or punishment too severe for them, if we would preserve manhood and liberty. I can recollect the time when it was one of our boasts that every boy could learn a trade or craft without paying for such privilege, but things have changed. Young America today, if he gets a chance, has to get that privilege through the permission of organizations which are foreign and antagonistic to our liberties.

I would have the members of this convention consider very carefully the industrial education of our youth, and agitate this question until the youth of the land has the same freedom in this respect that he had thirty or forty years ago, before we were cursed with foreign isms. If possible, let us have laws passed to prevent any further interference with our rights. This republic was founded by men who rebelled against the tyranny of an imperious and unjust foreign monarch. Shall we now submit to the tyranny of numbers controlled by a few who are unscrupulous and thriftless ? The republic was saved and the union preserved by abolition of the political heresy that man had a right to hold his fellowman in bondage, and rob him of the fruit of his toil. Shall we now permit American youth born to liberty to be subject to a bondage more humiliating than African slavery, because it is a bondage of natural right and worthy ambition to the meanest kind of a master, possessed of a trinity of vices — selfishness, unrighteousness and cruelty ?

Is it not high time for a new Declaration of Independence ? Give Young America a chance !

## Manual Training.*

BY J. G. MCCARTHY, OF CHICAGO.

THAT the National Association may justly bring this question within the scope of its mission will, it may be assumed, be conceded by all who have a thorough appreciation of the full meaning of the proposition. There is no other question of more importance to an association of builders than the one laid down. The influence of its adoption in the public schools would be more readily felt in the building trades than in any other. Perhaps the strongest arraignment that can be made against the present exclusively mental methods of the schools is the fact that they make little or no provision for the practical and skillful application of knowledge, and do not in any sense of the word actually do the things which have to be done by the great masses of the people in this everyday, matter of fact world about us. Books at best are but symbols of knowledge, and not knowledge itself, and are only a means of seeing through others' thoughts indirectly many of the things which can be more readily learned by actual demonstration. That the present system neglects the plant for the sake of the flower is demonstrated by the fact that the principal education of life only begins on the termination of the school days, and in all the principal centers of population its pupils, with a finished education, are earnestly seeking for opportunities to obtain the necessary knowledge to fit them for life's battles. It makes provision for the supplying of innumerable pulpitless preachers, briefless lawyers, doctors without a clientage and so-called business men who fail in all their undertakings, but neglects to take any note of the country's greatest need, American skilled labor. To such an extent is this true, that the opinion entertained by the Church in early ages, "Education is a dangerous thing for the masses," would seem to be literally true, for the reason that education, so-called, instead of inculcating the dignity and respectability of labor, and teaching its pupils in such a manner as to fit them to enter the world's industrial pursuits, tacitly forces them into the disreputable speculative practices of the "bucketshop," the gaming table and the race track. Into this high school feature of public education, but two and one-half, or at most three per cent of the total number of children attending public schools enters, and of this three per cent the ratio of males to females is as one to four. The ratio of expense per pupil, as compared with the lower grades, up to and including the grammar grade, as five to one, can consistently say through its management its pupils do not become carpenters, blacksmiths or servant girls ; but we cannot say that the carpenters and blacksmiths, aforesaid, do not bear the burden of conferring on its members of "polite society" these ornate accomplishments. What those who advocate the kindergarten manual training and trade school features of education are contending for is a class of carpenters, blacksmiths and servant girls, if you will, of sufficient intelligence to take their places as teachers beside the antediluvian pedagogue, who would supply us with polite members of polite society, leaving us at the mercy of the communistic foreigner in the realms of skilled labor, and thus further, if it were possible, degrade the native-born American mechanic. Demonstrating the laxity of the present system does not, of itself, in any sense of the word constitute an argument in favor of any other particular form, but does show the necessity for reform in our educational methods. It therefore devolves upon those who are advocating the adoption of manual training in the public schools, to show that it will, in addition to meeting the objections to the present methods, be productive of the best results, from an educational point of view, that are obtainable under existing circumstances. Manual training has the indorsement of all the leading minds in the realms of education, and demonstrates by experience that a portion of the time spent in the practical application and use of things gives better results in every sense of the word than has been obtained in the past, through the exclusively mental methods of the present system. It teaches the dignity of labor by example, by combining the practical with the theoretical, and enables its pupils to instruct themselves in the very thing which they will have to do on their journey through life. It is natural education by practical means, and makes the acquirement of knowledge a pleasure by arousing the curiosity of youth, and thus inculcating on the mind at the most impressionable moment a love and respect for physical labor which can never be eliminated. It makes the intelligent American artisan the equal of the artist, and places in their true light the lesser, or industrial arts, as the world's greatest civilizer. It exposes falsehood in a manner which cannot be done through words ; promises us great inventions rather than great men, and with one grand wave of its mighty arm eliminates from the land the opportunities of the money power to create class distinctions. It augments the ranks of labor from the native population of intelligent liberty-loving Americans, in contradiction to the ignorant vassals of foreign despotism, with no proper conceptions of the genius of republican institutions, and opens up, as it were, a new continent of opportunities to the heretofore neglected youth of our country, in the realms of skilled labor. Carlyle says : "Tools are the connecting link between barbarism and civilization," and that "Man without them is nothing ; with them he is all powerful." He again says : "Tools in the hands of intelligent men constitute the one great factor of civilization, in comparison with which all else sinks into obscurity."

The manual training method, combining as it does, when practical, the use of tools in connection with books, constitutes the *summum bonum* of education in every sense of the word, and particularly does it commend itself to practical men in the business world as the one great means for bringing about the thing of all others which the "National Association of Builders" strives for, namely, a revivication of apprenticeship on a basis of intelligence in harmony with the spirit of the age in which we live.

Perhaps the greatest anomaly of our multiform social fabric is the fact that the utility of manual and trade education is denied in our relations to the youth of the land and is recognized as the one all potent plan for making (what we should endeavor to make of the rising generation) intelligent skilled artisans of the criminal classes. Prison statistics show that of the many unfortunate inmates of our jails and reformatory institutions only about five per cent are mechanics, and also that of the number who are taught trades during their term of imprisonment, but a very small proportion are ever committed a second time. The greatest apparent obstacle to the introduction of manual training in the public schools is the difficulty in obtaining competent teachers, or perhaps not competent teachers, but persons of sufficient intelligence to conduct conjointly the mental methods of the present system with the practical plan of manual training. Knowing, as we do, that the vast majority of the rising generation will, of necessity, be forced into the very conditions of existence which this method of education will prepare them for, it behooves the National Association to take a position in the front ranks of its advocates. Special rather than general education is becoming more and more the requirement of success in the world's various activities, and the members of this organization cannot consistently place themselves in opposition to the plan which promises to give their sons and others the opportunity for obtaining, without the drudgery incident to the shop apprenticeship, the knowledge necessary to continue the successes achieved by their predecessors by long years of laborious toil and experience. We should then and at once demand of our educators the introduction of manual training, if not as a substitute for the high schools, at least as an auxiliary to them in the realms of education. If there is a necessity for the high schools there is surely a greater need for manual training, and the rank and file of the people who bear the greater part of the expense of the public school system are justified in demanding that provision be made for that system of education which will best fit their children for life's duties. Let us, then, place ourselves on record as advocates of this heretofore latent means for developing American manhood in its broadest applied sense, and say to our young men, you shall have the opportunity given you to fit yourselves for life's duties, not through the irksome and oftentimes disappointing channels of your necessity, which will give you in your youth what your fathers only acquired through years of toil and adversity. Then, indeed, can we truthfully say of the youth of our land,

Blest child of humanity, happiest man among men.
Who with hammer or chisel or pencil,
With rudder or plowshare or pen,
Laboreth ever and ever, with hope,
Through the morning of life,
Winning home and its darling
Divinities, love-worshiped children and wife.

Round swings the hammer of industry,
Quickly the sharp chisel rings,
And the heart of the toiler has
Throbbing that stirs not the bosom of kings.
He the true ruler and conqueror,
He the true king of his race,
Who nerveth his arm for life's conflict
And looks the strong world in the face.

*Paper read at the fourth annual convention of the National Association of Builders, at St. Paul, January 29, 1890, by D. V. Purington.

## Fifth Annual Convention of the National Association of Builders.

HELD IN THE CHAMBER OF COMMERCE AT ST. PAUL, MINNESOTA, JANUARY 27, 28 AND 29, 1890.

### FIRST DAY—MORNING SESSION.

THE fifth convention of the National Association of Builders of the United States of America convened in the hall of the Chamber of Commerce of St. Paul on January 27, at 10:30 A.M.

The session was called to order by the president, E. E. Scribner, of St. Paul, who introduced the Rev. S. G. Smith, of St. Paul, who opened the proceedings with prayer.

The President: Those of our delegates who at the close of the Chicago convention made a short visit to St. Paul will remember and be glad, I am sure, to renew their acquaintance with our then (as now) mayor of the city of St. Paul, the Hon. R. A. Smith. And, by the way, although our convention has just been opened by prayer by my friend and pastor, Dr. S. G. Smith, and you are about to be addressed by Mayor Smith, we beg to assure you that not all of our greatest and best men are named "Smith." (Laughter and applause.) You will now be addressed by his honor, the mayor. (Great applause.)

The president then introduced Mr. Robert A. Smith, mayor of St. Paul, who made the following address of welcome:

We assure you, gentlemen, that we feel greatly honored this morning in your selecting this city for the convening of The National Association of Builders, representing, as you do, most of, if not all, the important cities of this country. You, gentlemen, are from and of the people, and have entered the list with other professions and trades in the race for fortune, and by your energy, ability and success have succeeded. No class of our citizens is more familiar with the intimate relations of capital and labor than you are, for the reason that you are practical business men.

We are informed that there will be much discussion by your association in relation to the question of labor, and that you will determine that question so far as your association can do so. The people of this city and all over the country are waiting with the hope that you will discuss the question fairly and for the best interest of the laboring man, and that other kindred associations will fall into line and that strikes and business depressions will soon be among the things of the past.

Permit me, gentlemen, in behalf of our citizens, to extend to you a cordial welcome and the freedom of the city during your stay with us. (Applause.)

The following address was then made by the president of the association, E. E. Scribner:

GENTLEMEN OF THE CONVENTION,—It affords me great pleasure, as the representative of the Contractors' and Builders' Board of Trade of St. Paul, to add, on its behalf, a word of welcome to those already extended by our worthy mayor. Gentlemen, we trust that your short stay with us may prove both pleasant and profitable.

In the matter of your social entertainment, feeling our utter inability to offer such a varied and brilliant programme as that presented to previous conventions by the exchanges of larger and older cities, we were well content to show our loyalty to the National Association by acting in accordance with the recommendations of its Executive Committee on this subject, but we did think we held, in the proposed Winter Carnival, a trump card, to which even the most exacting economist could not object, but we regret to say that the powers that be, represented by the chief signal officer at Washington, were too strong for us, in that for two winters past they have procured an extra supply of subterranean or other fuel, and so changed our heretofore cold and bracing climate, that thenceforth St. Paul and Minneapolis are to be known as winter resorts for blizzard-stricken New York, or the cyclone and storm-swept plains of Texas, Missouri, etc. (Applause.)

We are pleased to see gathered here many gentlemen who, representing their several exchanges at previous conventions, have learned to know, to trust and to believe in the earnest purpose, desire and ability of each to legislate intelligently for the upbuilding and improvement of, especially, all concerned, whether as employé or manual workman, in the erection and construction of buildings throughout the United States.

We also gladly welcome other representatives of affiliated bodies, whom we meet this morning for the first time in convention assembled, and trust that the acquaintance thus formed may prove both pleasant and valuable. But we feel that we have especial cause for congratulation in the evidence that the influence of this organization for good is spreading to and permeating every important point in this broad land of ours, afforded by the presence here of delegates from the local exchanges of some six or eight cities, which exchanges are either newly formed or have not heretofore affiliated with this body.

As your presiding officer, it is not my purpose to trench in any degree upon the report of our secretary, which he will read to you at a later hour, hence I refrain from any special or detailed reference to the work done by your representatives in the past or that which they now seek to accomplish.

The question is frequently asked by some member of a local exchange, some doubting Thomas, "What has been accomplished through our organization? Of what value is it to us as a fraternity?" To such I would say that while our national association is a purely legislative body, while we have no power to enforce the adoption of our ideas and suggestions by the various affiliating bodies, while we are only permitted to *recommend* to them the fruits of our councils and deliberations, we have, nevertheless, accomplished much in the elevation and improvement of standard of thought and action among builders. We have grown! We have become and are becoming, not contractors and manual workmen only, but thinking men, men who, in ascertaining our own power, in learning to respect ourselves, are earning and securing the respect and esteem of all the better classes, the right-thinking men of all professions and callings in the various localities in which we reside.

The work heretofore accomplished by this body having been, as stated, advisory, and in the form of recommendation rather than mandatory, the *general principles* thereby inculcated must have time in which to accomplish the work desired. Let us not be too impatient in looking for more apparent results.

I think, however, a member of a local exchange affiliating with this body, himself actively engaged in a branch of the building trades and coming in frequent contact with capitalists and their architects, can fail to have noted a remolding of sentiment, a growing respect for the art of building and its faithful representatives—a more distinct recognition of the value of the builder in all that tends to promote the comfort, the happiness and welfare of the citizens of this great country. I think he must have noted that not only are we, as builders, coming to have greater faith in and respect for ourselves, but that our brother builder, the architect, is learning to respect and have faith in us and our honesty of purpose not only, but in our ability as well; that in the preparation of plans and specifications for the use and guidance of the builder, in the rules and methods under which such builder is asked to estimate on the cost and value of construction proposed, in the general use and adoption of our "Standard Contract," we see ample evidence already that the suggestions made by this body are being favorably received and acted upon by the best exponents of the science of architecture in the country, and the fact is being recognized as never before our organization, that to the attainment of the best results in building, it is necessary that the designer and the artisan should work together, feeling that they are mutually dependent the one upon the other. (Applause.)

But for this organization and the earnest discussion by its membership of the apprenticeship question, and the needs in American youth in this direction, the seed planted by Col. Auchmuty in New York would not so early have borne such rich fruit—its influence to spread and widen thence in the hands of earnest practical builders, till every city in which has been planted an exchange affiliating with this body shall have its well-fitted trade school as well, from whose portals shall graduate, not lawyers or doctors, but young men proud of the right to bear and honor the name of mechanic. (Applause.)

But for this organization and its efficient and hard working secretary, (applause) the builders of this country would not now be ably represented by an official paper, whose columns are teeming with thoughts and suggestions of greatest value to its clientage.

But for this organization, literally nothing would have been done to concentrate and give definite expression to the views and opinions of those engaged in the various branches of the building trade as to their rights; no steps would have been taken to enter the wedge of reform in any direction.

In closing I have but to remind the delegates here present as representatives of filial bodies of this National Association, that these yearly conventions of ours are but the opportunities for consultation together, for debate upon the most salient features of matters that concern the building fraternity at large, and for decision as to the general policy wisest for all to adopt.

The *real* work, the *real* result, the *actual reform* secured are, or should be, the work of the filial bodies during the year.

With this statement I will close, realizing that all the time at our disposal will be needed for the discussions and consultations to which I have referred.

The President: The first business before the convention is to appoint a committee on credentials. How shall that committee be appointed?

Anthony Ittner, of St. Louis: Mr. President, I move you that a committee of five be appointed, to which committee shall be added the secretaries, to examine the credentials of the members of this convention.

The motion was adopted.

The president appointed as members of such committee Anthony Ittner, of St. Louis; W. H. Albertson, of Philadelphia; John J. Roberts, of New York; Lawrence Grace, of Cincinnati, and A. W. Murray, of Chicago.

Secretary W. H. Sayward: Mr. President, I desire to state that I have asked Mr. William Harkness, Jr., of Philadelphia, and Mr. Charles Voshall, of Rochester, to act as my assistants during this convention. I have several announcements here, Mr. President, which have lately come to my hands, to read:

ST. PAUL, January 27, 1890.

*To The National Association of Builders of the United States:*

The Industrial Union, of St. Paul, extend to your body a most cordial invitation to meet with them in this room this evening at 8 o'clock. We much desire an expression of your views as to the requirements for a manufacturing city or center, and also to become acquainted with you and to personally assure you of our hearty interest in your organization, as representing the leading manufacturing and building element of the country.

(Signed) CHARLES E. MARVIN,
*President of the St. Paul Industrial Union.*

PIONEER PRESS BUILDING COMPANY,
ST. PAUL, January 25, 1890.

*Mr. H. R. P. Hamilton, Secretary of the Contractors' and Builders' Board of Trade, St. Paul:*

DEAR SIR,—On behalf of the Pioneer Press Company I herewith extend an invitation to the delegates and visitors to the National Convention to be held in this city next week, to visit and inspect the new Pioneer Press building on Thursday morning, January 30, 1890. Very respectfully yours,

(Signed) FREDERICK DRISCOLL, *Manager.*

NEW YORK LIFE INSURANCE BUILDING.

*F. G. Draper, Chairman of the Committee of Entertainment, St. Paul, Minnesota:*

DEAR SIR,—Understanding that the members of the Contractors' and Builders' Board of Trade are to entertain the delegates and visitors to the National Convention, the New York Life Insurance Company respectfully invite you to visit the company's building in this city at any time convenient to your board, when every opportunity will be given to obtain a view of the city as well as to inspect the building in all its details. Trusting you will accept this invitation, and assuring you that every courtesy will be extended to your guests, I am

Very truly yours,
(Signed) V. C. GILMAN, *Superintendent.*

Upon motion of Anthony Ittner, of St. Louis, it was ordered that the sessions of the convention commence each day at 10:00 A.M. and 2:00 P.M., and the session adjourned.

### FIRST DAY—AFTERNOON SESSION.

The President: The first regular business in order is the report of the Committee on Credentials.

The report of the Committee on Credentials was presented by Mr. Ittner as follows:

Mr. President: Your Committee on Credentials beg leave to report that there are 119 delegates present, representing thirty-three states, as follows: Baltimore, 3; Boston, 7; Brooklyn, 2; Buffalo, 3; Chicago, 13; Cincinnati, 14; Cleveland, 2; Denver, 3; Detroit, 3; East Saginaw, 2; Grand Rapids, 2; Indianapolis, 3; Kansas City, 5; Louisville, 2; Lowell, 3; Milwaukee, 4; Minneapolis, 3; New York, 8; Omaha, 3; Philadelphia, 7; Portland, 1; Providence, 3; Pittsburgh, 3; Rochester, 3; St. Joseph, 3; St. Louis, 6; St. Paul, 4; Sioux City, 2; Syracuse, 2; Washington, 4; Wheeling, 2; Wilmington, 2; Worcester, 2: total, 119. Total of exchanges represented, 33.

Your committee recommend that alternates and visitors be entitled to seats in the convention, but to have no voice or vote, except in the absence of regular delegates. Respectfully submitted,

ANTHONY ITTNER, *Chairman*, St. Louis.
J. J. ROBERTS, New York.
LAWRENCE GRACE, Cincinnati, Ohio.
A. W. MURRAY, Chicago, Ill.
WILLIAM H. ALBERTSON, Philadelphia, Pa.

On motion, the report was accepted.

The secretary then called the roll of the delegates, as follows:

BALTIMORE—E. L. Bartlett, W. F. Bevan, E. D. Miller.

BOSTON—William A. Sherry, Alonzo S. Drisco, James D. McLellan, Samuel Farquhar, George F. Sheppard, Melville C. Grant, William H. Sayward.

BROOKLYN—Benjamin C. Miller, W. L. Gidden.

BUFFALO—Edw. M. Hager, H. C. Harrower, M. J. Byrnes.

CHARLESTON, S. C.—No delegates.

CHICAGO—George C. Prussing, delegate-at-large; D. V. Purington, George Tapper, W. H. Iliff, W. A. Murray, M. B. Madden, Francois Blair, James A. Miller, E. Earnshaw, H. J. Milligan, J. F. Barney, Thomas Moulding, F. V. Gindele.

CINCINNATI—J. Milton Blair, George E. Mason, Archibald Colton.

CLEVELAND—Arthur McAllister, Robert H. Jenks.

DENVER, COL.—A. J. Ripley, George F. Harvey, Charles W. Fair.

DETROIT—Henry George, Alex Chopotow, Jr., William J. Stapleton.

EAST SAGINAW, MICH.—M. Winkler, J. H. Qualmann.

GRAND RAPIDS, MICH.—John Rawson, H. E. Doran.

INDIANAPOLIS, IND.—James E. Shoner, J. C. Adams, Joseph Ernst.

KANSAS CITY—W. W. Taylor, Frank J. Shemmick, H. P. Stewart, W. A. Kelly, A. Suitermeister.

LOUISVILLE—Samuel P. Snead, John E. Carpenter.

LOWELL, MASS.—James W. Bennett, B. S. Whitcomb, John A. Coggeshall.

MILWAUKEE—Garrett Dunck, L. J. Mueller, Clifford Chase.

MINNEAPOLIS—Barclay Cooper, Herbert Chalker, F. A. Fisher.

NEWARK, N. J.—No delegates.

NEW HAVEN, CONN.—No delegates.

NEW YORK—Marc Eidlitz, Richard Deeves, Charles A. Cowen, William C. Smith, John P. Roberts, John M. Canda, John McGlensey, Jacob Brown.

OMAHA—Richard Smith, John A. Hart, G. J. Le Ville.

PHILADELPHIA—William Harkness, Jr., Stacy Reeves, William Halbertson, David A. Woelpper, Peter Gray, F. A. Harris, William S. McGinley.

PORTLAND, ME.—A. D. Smith.

PITTSBURGH—T. J. Hamilton, Samuel Francis, William R. Stoughton.

PROVIDENCE—Richard Hayward, James S. Hudson, Henry W. Goff.

ROCHESTER, N. Y.—William H. Gorsline, J. H. Grant, Thomas W. Finucane, C. W. Voshall.

SAN DIEGO, CAL.—No delegates.

SAN FRANCISCO—No delegates.

ST. JOSEPH, MO.—John DeClue, D. E. Marshall, R. M. Abercrombe.

ST. LOUIS, MO.—Samuel Evans, Thomas J. Kelly, P. McGrath, Anthony Ittner, Thomas Mockler, Thomas P. McKelleget.

ST. PAUL—W. H. Ulmer, J. W. L. Corning, M. G. Craig, T. A. Abbott.

SIOUX CITY—Frank Clark, F. F. Beck.

SYRACUSE, N. Y.—Henry F. Crawford, J. A. Isley.

UTICA, N. Y.—No delegates.

WASHINGTON, D. C.—D. J. McCarty, Joseph Fanning, E. J. Hannan, Thomas J. King.

WHEELING, W. VA.—G. W. Beggs.

WILMINGTON, DEL.—Archibald S. Reed, John P. Allnend.

WORCESTER, MASS.—H. W. Eddy, C. D. Morse.

The President: The offering of resolutions is next in order. Such resolutions as you may desire to present will be offered by the chairman of delegations in duplicate and in writing, and will be referred, in all cases where there be no objection, to the Committee on Resolutions.

The secretary then read a resolution from the New York delegation, which was referred to the Committee on Resolutions, as follows:

RESOLUTION SUBMITTED BY NEW YORK DELEGATION.

WHEREAS, During the first century of the history of the American nation, our people were blessed with an almost entire freedom from any labor disturbing elements within its borders; and peace and prosperity attended our country in all things that insure domestic happiness and the wealth of a nation; and

WHEREAS, Recent years have developed turbulent spirits and discontent, which threaten to mar and perhaps destroy both the peace and prosperity of our happy people; and

WHEREAS, We believe that the present state of apparent discontent existing within fields of enterprise and labor, causing strikes and disturbance through a portion of our country, is not of a universal nature and deep-rooted in the American mind, but it is to a great extent attributable to a limited element within the great mass of the working people, which element is not capable of fully appreciating the blessings here enjoyed, for the reason of being educated in a different school of ethics and principles than that which is "to the manner born;" and

WHEREAS, It is a duty that all good citizens of patriotic principles, and a worthy pride in the welfare and prosperity of our whole people, owe to themselves individually and collectively to use their best efforts and most urgent endeavors to restore our disturbed and threatened business prospect to its heretofore prosperous and peaceful condition; therefore,

*Resolved*, That the executive board of the National Association of Builders be and is hereby instructed to consider the practicability of organizing local and state societies, and a national society, composed of employés and employers of all trades and callings of the working people, with a view to bringing them into closer communion with each other in relation to employment, labor and compensation, and to disseminate among them, by publications and lectures or any other educating processes deemed advisable, a true appreciation of the American idea, founded upon a unity of the people, in respect to the laws of our land, the requirements of good citizenship, and the immediate laws which control their welfare and success in life under a republican government, without regard to race or religion.

The president announced that the report of the secretary was next in order, and thereupon the secretary presented his report.

THE SECRETARY'S REPORT.

The position of the secretary of this association is so peculiarly unique that it is hardly possible to make an ordinary report which shall be thoroughly comprehensive. The secretary is the only official receiving payment for his services; therefore it is expected that he shall devote an appreciable amount of his time to the affairs of the association. Indeed, the constitution particularly stipulates that he "must be able to give sufficient time to the association to efficiently carry out its purposes." This last phrase, here quoted from the constitution, is an index to what I mean by the unique character which attaches to this particular secretaryship in contradistinction to the secretaryship of other associations. In most positions of this character the secretary is simply a secretary in the usual acceptation of that name; and while it will always be most true that the secretary of any organization may expect to be called upon for all sorts of service, it is the only case on record, to my knowledge, where the secretary is made so distinctly responsible for the efficient accomplishment of the designs of an association.

Whether the framers of the constitution realized how much of a responsibility they were so conspicuously placing upon an officer who usually occupies a semi-subordinate position, or whether they foresaw that such must be the necessary sequence of our form of organization, I cannot fully say; but it is, however, a fact that your secretary, whose hair has become prematurely gray in his three years of service, has found the duties of his position growing more and more varied in character until it is impossible to speak of them as comprehended in that clerical significance which the term of "secretary" usually implies.

It must be borne in mind that the functions of this association were at the outset acknowledged to be an "unknown quantity," so to speak. The desirability of the organization was enthusiastically admitted, but just how its powers might be best exercised and applied, in just what direction its influence should be exerted, it was readily seen must be developed by study and trial. It has been natural to permit the task of exploration, experiment and development to fall largely into the hands of the secretary, and as "time and the hour" have brought certain *demands* to the surface, it has been equally natural to permit him to meet them to the best of his ability. In thus referring to the extent and variety of his task, your officer does not intend to complain, but simply desires that you may understand how it happens that a secretary's report covers so much more ground than usual, and how it happens to contain so much in the way of suggestion for the future, that ordinarily would not be thought within the province of such a functionary.

If by force of circumstances your secretary has been permitted and often obliged not only to act as scribe for the association, but also in its behalf to act as interpreter, guide, philosopher and friend to those whose adherence was desired, or who came seeking counsel and information, then he must be permitted at the close of the year to give you not only the bare facts of his record, but also his experience in endeavoring to efficiently carry out the various recommendations of the association, his views as to its present status and the status of filial bodies, and the opportunities and duties of the future.

In the first place it is desirable that the convention should be informed as to the present status of the association, as compared with previous years. At the first convention, for organization, at Chicago, twenty-seven cities were represented by delegates from various builders' associations. At the second convention, at Cincinnati, twenty-six exchanges were represented. At the third and last convention, at Philadelphia, twenty-eight exchanges were represented, all of which have maintained their relation in accordance with the constitution.

There have been seven very important additions to our membership. Denver, Colo., Omaha, Neb., Lowell, Mass., Pittsburgh, Pa., Louisville, Ky., Wheeling, W. Va., Portland, Me. Our membership now comprehends exchanges or associations of builders in thirty-five of the principal cities of the country. While this is a large presentation and most significant from the fact that nearly all of the large communities of the country are included, there are still many cities which should be represented, notably in the southern section of the country, which makes but a poor showing with us; particularly when the enormous development and growth which has been going on there for the last five or ten years, is taken into consideration.

The condition of the local bodies is on the whole much more vigorous than a year ago; and in addition to this many new exchanges have been organized which will undoubtedly soon lend us their aid, support and counsel, if they have not already done so. Of the seven associations newly represented at this convention, six of them may be fairly stated as freshly organized since our last meeting at Philadelphia. Another very noticeable and promising feature is the steps that are being taken by some of the older filial bodies to remodel or reorganize upon a more satisfactory and permanent basis. This rehabilitation of the older associations, and the establishment of new ones upon lines which experience has shown to be safest and most effective, is most significant and encouraging; for the carrying out of the recommendations of the National Association, and the securing of the benefits to be derived from its labors, depends entirely upon the strength and permanency of the local bodies and the activity and intelligence with which they apply the general policy and principles prepared and promulgated by the central body.

In this connection it is appropriate to refer to the growing interest in the formation of exchanges all over the country. No week has passed during the year in which letters have not been received making particular inquiry as to the best methods for forming exchanges, and asking to be informed on all points relative to usefulness of such bodies, and how connection may be obtained with the National Association. This is indicative of a healthy growth of the idea of association, and as such has received a very large share of attention and encouragement from the secretary. The correspondence has not been confined to one section, but has come to us from all quarters, even including certain localities in the South, which has previously been referred to as lacking in the representation which we ought to have from that part of the country. This condition of things, if properly assisted and encouraged, will be productive of many new associations in the near future, all of which will undoubtedly affiliate with us, and thus strengthen and increase the effectiveness of the National Association.

During the year communications have been received from *other* national associations, suggesting the feasibility of joining with this body, and taking part in its deliberations; but up to the present time such an alliance has not seemed desirable or proper under our existing form of organization. Our present opportunity is large and comprehensive and with so wide a field of work yet undeveloped there would seem to be no advantage in making absolute connection which might result in future embarrassment. In this connection it will be appropriate to refer to the interest and satisfaction in the work which we have undertaken, that have been manifested by other organizations, by private individuals, and by newspapers and periodicals all over the country. To these latter, the association is under great obligation for the generous treatment received at their hands, and the wide publicity which has been given to our proceedings.

To THE INLAND ARCHITECT, of Chicago, this association has from the first been particularly indebted for the most hearty and thorough coöperation, and it is fitting that it be thus publicly recognized and acknowledged.

At the time of our last convention, at Philadelphia, the *Public Ledger* of that city exhibited the most marked generosity toward us, not only giving full detailed reports of all our proceedings in its columns, but supplying all delegates and other visitors with copies of each issue free of charge, besides offering many other courtesies to delegates, during their visit.

All of the specific orders of the last convention have been duly carried out. Five hundred copies of the official detailed report of the third convention have been printed and distributed to all filial bodies, and also to many other kindred associations, not only in this country, but in foreign countries, where correspondence and exchange of printed matter has been established. In this connection it is interesting to note that many societies and private individuals, here and in Europe, have made special requests for our documents and reports. From the Public Library of London a request was recently received for all documents issued or to be issued by this body, statement being made that they were frequently inquired for by students and others interested in economic questions, as well as by builders. The most recent communication in this line was a long and interesting letter from the Builders' and Contractors' Association of Brisbane, Queensland, Australia, which stated that their association had been called to our important body, and that to assist them in forming a similar organization for their country, they appealed to us for advice and counsel. The letter recited some of the improper conditions to which builders in Australia were subjected, which was startlingly like those with which we are familiar, and closed with expressing the hope that as the interests of builders are identical everywhere, and as their efforts were to be directed toward elevating and improving the condition of the building fraternity, that we would not deny them the help which the weak always had a right to expect from the strong. It is, perhaps, needless to say that your secretary extended to the Australian builders, in behalf of this association, the right hand of fellowship, and in sending them every sort of document, record and advice within his reach, assured them that the National Association of Builders of the United States of America felt the strongest bond of brotherhood with builders everywhere, and would do its utmost to aid and assist them.

Large editions of Colonel Auchmuty's address on "Trade Training," of Mr. Hatfield's address on "The Relation of the Architect to the Builder," and of the secretary's address on "The Advantages and Opportunities of Builders' Exchanges," have also been printed and distributed to filial bodies. There has been a large demand, also, for these pamphlets from localities where new bodies have been in process of formation, and where older societies, not yet connected with us, were seeking for information as to the work we are doing.

During the year an important step has been taken to assist in carrying out the purposes and recommendations of the association. This step has been the monthly distribution of the official utterances of the National Association from

the secretary's department, in the form of a periodical, the business management and financial responsibility of which has been assumed by a firm of publishers with headquarters in Boston, and a branch office in Chicago.

The editorial department has been entirely controlled by the association, through the secretary as editor, so that the paper has been wholly devoted (aside from the advertising department) to the interests of this body. It has been sent monthly since August 1, 1889, to every individual member of each filial body, as an official document of the National Association, with no cost entailing either to individuals or to the local exchanges. Neither has the National Association been involved in any cost, although reaping a very great benefit therefrom. It is the desire of the Executive Committee that individual members receiving this periodical should understand that they are not expected to pay anything additional on that account, their subscription, being virtually covered in the annual per rata assessment paid into the national treasury by the local bodies. Subscriptions will, however, be taken by the publishers from persons not connected with the National Association; indeed, they will not refuse to take subscriptions from members, should they be offered in the spirit which has been frequently manifested by some members who have insisted upon paying for the paper, and have accompanied their remittance with the most friendly expressions of the value which the paper has for them personally. Such subscriptions will be accepted by the publishers in the same spirit in which they are sent, for every little helps, and it is well known that the early days of establishing a periodical are far from profitable. In this connection it may be well to state that this paper offers exceptional opportunities as an advertising medium to parties who wish to bring their goods to the attention of those who are directly engaged in building operations, and as the association is getting a very substantial benefit at no cost, it seems no more than fair to bespeak for the publishers, who depend for their remuneration on advertising patronage, the aid of each and every member of the association in this direction.

Although the assumption of the editorial department of the paper has brought a new and arduous duty to the secretary, he has gladly undertaken the work, for the reason that it affords an opportunity to thoroughly disseminate the principles and purposes of the National Association, which has been sorely needed in the past, and which was practically unattainable by any other means. One of the most discouraging features of the secretary's work during the three years of our existence has been the utter impossibility of conveying information to the many communities of builders already represented in the central body, with regularity and efficiency, giving them assurance that their officers were faithfully carrying out the work intrusted to them, as well as presenting to them new features and arguments in relation to forms already undertaken, or suggesting other measures worthy of adoption. This opportunity is amply provided in this monthly official document, and there is no question but what it will prove of inestimable value. As one correspondent has happily expressed it, "Reforms can only be secured by constant hammering, and an official paper furnishes just the opportunity for this persistent and necessary work." Each particular undertaking of the National Association is given a special department, under which everything relative to it, either in the way of correspondence or editorial argument, may always be found, thus keeping the matter fresh in the minds of all. Filial bodies are asked to give monthly reports of all matters occurring in their vicinity, either of local or general importance to builders, and a department is specially assigned for these reports. As yet the full significance of this opportunity is not sufficiently realized, and while the space allotted to a filial body has contained simply the words, "No report this month." This, however, will be corrected in time, and eventually the pages will be fully occupied with interesting reports from secretaries, of the methods, successes, disasters, doubts, fears, experiences and questioning which have been adopted by, moved and excited their constituencies. Besides this the editorial columns are freely opened to each and every individual in any way connected or interested in the National Association; indeed, the secretary especially urges upon all the great advantage it will be to our interests if members will take this opportunity to present their views on any and every question of interest to the building fraternity. By this means their thoughts and arguments will be placed before a large and select audience, and will without question excite that free and full discussion so vital to the correct solution of any problem.

The opportunity offered by this paper of widely spreading our views and our work into new fields, cannot be overvalued. In years past the letters which have come flooding in upon the secretary, filled with all sorts of questions as to organization of local bodies, their work, their functions, and hundreds of other ideas and queries which are sure to present themselves, have had to be answered as fully as the limitations of one man's capacity would permit. Sometimes the answers would have to be ten times as voluminous as the letters which procured them, and would after all reach but one individual. Now, by means of this official paper a single editorial covering a point at issue, or a general statement as to organization work, or the work of the National Association, reaches thousands and is readily available to send to new inquirers. It readily can be seen how much more successfully and thoroughly the affairs of the association can be administered and how much wider its influence extends through the use of this piece of machinery. Its value is only partially comprehended at present, but enough has already been demonstrated to show that it must always remain prominent as one of our chief as well as one of our cheapest working forces.

The secretary, as editor of this paper in behalf of the National Association, would particularly and specially urge upon all members that they send to him at every opportunity suggestions and thoughts in relation to the many subjects which are under manipulation. In the Uniform Contract department, items showing the inconsistencies and hardships imposed upon contractors under the multiform system of contracts, that system which presents a different form in every architect's office. In the apprenticeship or trade school department, such information, argument and encouragement as will gradually lead to the establishment of this system upon a permanent basis, under the direction and control of the employing mechanics. In the "Code of Practice," statements showing the multitude of directions in which reforms are needed in existing customs between contractor and owner, as well as between contractors themselves, to the end that a more thorough and complete understanding may be obtained as to the rights of all, and contractors be gradually educated into more thorough business practices in all their relations so that better and safer conditions may finally prevail.

Another field of labor to which the secretary has been called to devote considerable time and attention during the year, may be fittingly described as missionary work. In this department there has been so much demand that every moment of the secretary's time since the last convention might have been profitably devoted to it. This, of course, it has been impossible to do, but a very considerable amount of effort has been expended in this direction with very satisfactory and happy results. Without taking up the time of the convention by going specifically into details, it will be sufficient to say that something over twelve thousand miles have been traveled and exchanges visited in thirty-five cities during the year. In most of these cities exchanges had been organized prior to the visit of the secretary, but in a few cases it was the initial step of a new association. The value of such work it is difficult to describe in the limits of a report which must cover a great deal of ground, but it can readily be understood that where exchanges are comparatively new and the membership does not thoroughly grasp either the usefulness of the exchange idea, or the large opportunity for improvement which comes through the union of many individual interests in one association, that a visit by one who, by education, and by the official rank of a central organization, armed with a wide experience in such affairs, will do an amount of good in the way of awaking interest, and giving encouragement, much beyond the particular ability of the missionary. It is a fact that a man who may be considered in his own city as a person of ordinary caliber, will often prove to be of very considerable value as a visitor in other cities. The old saying that "a prophet is never without honor save in his own country" is quite applicable in this connection. A new voice, a fresh personality, the presentation of new ideas or old ideas in a new dress, or suggestions of different character from those which we have become accustomed to, have an attraction and an influence which all acknowledge, and the secretary has no hesitancy in saying that abundant proof has been given that the work of this character which he has been called upon to do, has resulted in an infinitely greater amount of good in exciting new interest, awaking new thought, and impelling toward better conditions, than could possibly be accounted for by any particular ability displayed by him. But newly organized bodies are not the only ones capable of being benefited by visitations of this character. Old bodies need electrifying sometimes, and often may be startled into new vitality and fresh vigor, and this also has been one of the duties of your missionary. The places which would have been glad to receive such personal service as this, but which have had to be denied on account of lack of time and strength at my disposal, have been labored with and for through extensive correspondence, of which our voluminous letter files and copy books bear ample testimony.

In the line of statistics the secretary has been obliged to confine himself to the same restricted ground as last year. It is utterly impossible, without very much greater clerical assistance than has been available, to adequately cover the ground in this department, which, no doubt, many would think desirable. My researches show that there is a very considerable increase in associations more or less related to the building business, over those which I reported a year ago. I now have record of the following:

| | | |
|---|---|---|
| National associations | 33, | an increase of 20 |
| Sectional associations | 34, | " 19 |
| State associations | 73, | " 13 |
| City associations | 372, | " 35 |
| Canadian associations | 29, | " 9 |
| Total | 541, | total increase 96 |

Giving as a total in the United States and Canada 541 associations, an increase over those reported last year of 20 per cent.

Some of this increase may be accounted for by the fact that the existence of certain bodies had not been traced at time of last report, but it is a fact that a large proportion of the increase is entirely new. With this very bald statistical report the Association will have to be satisfied if not content, for even to secure this much information the secretary has had to encroach upon time which it is doubtful he was authorized to use, when to do so other and more important matters may have been neglected.

While confining this report largely to generalities, it is, perhaps, proper to refer to one particular effort which is of special importance, and a little outside of the usual trend of the Association work. Early in the year attention was called to the fact that the United States government plans which used to be deposited with the executive officers of the principal cities for the convenience of builders in making estimates, had suddenly been withdrawn. Correspondence was immediately opened with the Treasury Department to secure a renewal of the old custom, which correspondence may be found in detail in the columns of the official organ. No favorable result has yet followed, the department claiming that they have not funds enough to permit this placing of plans. This reply seems a little inconsistent, but the whole matter has been placed in the hands of the Legislative Committee, in the hope that they may prepare a bill for this convention to approve and take action to secure its presentation to congress, so that funds enough may be appropriated to re-establish this custom which helps to emphasize the importance of our associations, and gives opportunity to estimate on such work to so many of our members.

The secretary is unable to report as yet much progress in the direction of our trade school system of preparing and training mechanics. The Philadelphia Exchange is the only one of our filial bodies which has taken any steps toward practically setting up a training school of the kind approved in our previous action. It is with great regret that this lack of action is reported, for of all the undertakings of this body this one, which involves the systematic training of mechanics in the various trades, is one which should awaken the keenest interest and the most definite and immediate work on account of the pressing needs. Our plan as adopted at Cincinnati, amended and again adopted at Philadelphia meets the heartiest approval of that earnest student and practical worker in this field, Colonel Auchmuty, and he naturally feels somewhat uneasy because our efforts have not as yet produced more practical results. This much, however, may be said in explanation of the apparent inertness in this direction: The plan or system is a radical change from anything previously existing, and it takes time and continual hammering to produce anything like substantial results, no matter in what field or how important the reform may be, and these facts together with that already referred to, that builder's associations have hardly grasped their capabilities for work as yet, conspire to delay the consummation which is devoutly wished and hoped for by all. We must possess our souls with patience, but we must also persistently work in this direction.

There has not been much energy displayed or much success attained in the agitation or establishment of "that code of practice which should prevail when estimates are being submitted by contractors in the building trades," which code was adopted at the last convention. Filial bodies have failed to realize to any great extent, that the rights of which they have been bereft will not be restored to them without persistent effort on their part. They have not yet learned that a determination to secure just and proper conditions will surely result in obtaining them. The genius of indisputable fact that architects and builders must come to consider that the contracting mechanic has any rights which they are bound to respect, and they act accordingly. For this condition of things the contractors themselves are largely responsible, but they have not as yet awakened enough to a proper sense of their powers to insist upon the acceptance of the code recommended by this body.

There being a special committee on the subject of the uniform contract, it will not be appropriate to refer more than incidentally to the progress made in this department. The observation of the secretary is that the establishment of this standard form is slow but sure; that its thorough adoption depends more upon the contractors themselves than anyone else, and that they can surely obtain its use, if they persistently call for it. He is also more thoroughly convinced than ever, by the experience of the past year, that the benefit to the building fraternity generally of this single act of the National Association is so immense already that all expenditure of time and money involved in procuring our organization, and maintaining it thus far, has been returned a thousandfold, and when the advantage to all builders for the future is contemplated, the grand result is simply impossible of comprehension.

The work of the year has now been rapidly summarized, and as intimated in the opening of this report, a little space in closing will be devoted to the

PROMISE OF THE FUTURE.

The inquiry is not infrequently made, what can there possibly be left for the National Association to do, what need is there for such an organization in the future? We have acted upon the apprentice question, on the uniform contract question, on the lien law question, on the labor question, on the code of practice for estimating, etc., now what in the world is there left to do? To all such queries I make answer: The National Association has really only just begun its work, it has merely outlined some of the most prominent of the demands which its real work is now to be entered upon, has practically only called attention to the opportunities for united action, specifying certain particulars in evidence that there is warrant for believing that in these things there is the most immediate and pressing need of persistent action. To all such queries I reply: True, we have formulated our opinions to a certain extent upon some of the more conspicuous needs of builders in their business, and in the conduct of their work, but we have in reality hardly done more as yet than turn the glare of our searchlight upon these needs, and but little has thus far been accomplished in securing the results desired.

Let no one imagine that all is done when we have simply advanced far enough and have devoted time enough in considering our rights and needs to put into definite declaration what we conceive them to be, these steps are indeed necessary but they are but preliminary. To correct the lien laws or secure their final abolition; to establish thoroughly and permanently an intelligent system of training boys and young men to become skilled workmen; to obtain a reasonable and safe solution of the labor question, so that organizations of employers and organizations of workmen may act harmoniously to their mutual benefit, instead of being in constant antagonism; to secure the general adoption of a standard form of contract, so that the system of agreements for building work may be uniform everywhere, and the contracter be assured thereby of protection in this most important part of his business relations with the owner; to thoroughly establish a fair and equitable code of practice in the matter of estimating, in place of the indefinite no-system which at present prevails to the constant injury and loss of the contractor; to do all these things and the multitude of others that are constantly coming to the surface is no undertaking of a few years, indeed, it can never be said that these things have been accomplished for good and al and have been so entrenched that they can be left to take

care of themselves. The youngest of us here present will not live long enough to see the day when the work of the National Association may be declared finished, and its services no more needed. There will be, no doubt, times when less enthusiasm may be expected, as is natural in all affairs, either public or private, either of social or business nature, but to be the instrument of benefit and value which its declaration of principles announces, to really create better conditions for the building fraternity, the National Association must be looked upon as an institution, an institution as permanent and abiding as any of the institutions which guard and guide the interests of communities. The reforms which we as business men particularly need to secure and the conditions which we particularly desire should prevail, will not be obtained or maintained for us by any of the existing machinery or methods of government, either municipal, state, or national. We have a domain of our own, entirely distinct and apart, in which we must establish a domestic economy of our own, and sustain it by ourselves and for ourselves, for the reason that no one else will do it for us, and sustain it continuously for the reason that no forms of government or direction, however perfect in their conception and complete in their parts, can be left to run themselves. Machinery needs constant attention to keep it in condition to do the service expected, and a neglected oil-feed, or a loose nut or washer will quickly cause serious damage. A garden, however beautifully it may have been prepared, if neglected, soon goes to seed, and "things rank and gross in nature possess it merely."

The work before the National Association is simply immense, and those who have been studying the problem with the closest scrutiny are truly overwhelmed with the amount and variety of the service which it may properly be called upon to render. The National Association must be an educator, and to be an educator must educate itself; put itself into condition to be able to convey instruction and information to all its filial dependencies and adherents. This field for work is as wide as the country. Take matters as they exist today, and it may truly be said that few cities have exchanges of builders that are even organized in a form which makes possible a high order of attainment; and I think I do not misstate the situation when I say that the very best of our local bodies have not as yet fairly started upon their legitimate career of usefulness, and have not begun to develop the strength, or take the position as representative associations, to which they are entitled.

The reorganization of existing associations and the establishment of new ones on the most approved lines, is fitting work for the National Association, and no one knows better than your secretary the tremendous amount of work which will be necessary before even a small percentage of the cities and towns of this immense country of ours will be blest with exchanges of builders properly organized and equipped for the attainment of desired results. Then there is the constant "coaching" and oversight of local bodies to produce and stimulate growth, to preserve and obtain those reforms for the benefit of the individual builder which the central body has outlined and recommended. If anyone thinks that there is not an immense amount of legitimate and valuable work for the National Association, work which cannot be done by any other agency; if he thinks that the National Association should not eventually become a permanent institution, with a corps of able men to guide and direct its various departments, then let him stand in the secretary's place, and look through his eyes upon the prospect that lies before him, let him make a missionary tour or two, let him read the thousands of letters which come pouring in, see how much work is needed, how much help is craved from all sections, and perhaps he may realize for the first time that the secretary's task has even in these early days been no sinecure, and may also realize that the statement that we have but begun our work is absolutely true.

I appreciate the fact that the ever present question of the great expense of maintaining the National Association will be brought forward in this connection as an important factor, and one which might seriously disturb the permanent establishment referred to. The great and manifest gains which we have obtained and are to obtain, are and will be distributed so quietly, so naturally, that the individuals benefited, not even crediting the agency which has procured these benefits, will too often begrudge the pittance which they return to support their benefactor, and continue it in its good work. It seems cheap and petty to spend any time in argument in regard to this question of expense of supporting the National Association, when we know so well that the expense to each individual contractor, up to the present time, has not been greater than three-fourths of a cent per day. But I am constrained to do so, knowing how much breath is apt to be wasted over a really insignificant matter of expense, such as I have shown ours to be, and because I think I may predict a future condition of things, wherein each filial body, instead of contributing to the funds of the National, will in effect be drawing cash dividends by virtue of their connection with it, in addition to all the other advantages obtained. To describe how this is to be accomplished would be trespass on the domain of one of our important committees which is to report later, but I may be permitted to anticipate that report to the extent of saying that when the plans of the Builders' Surety Committee are fully consummated, as they certainly will be, each filial body will find its treasury annually enriched to an extent commensurate to the amount of capital stock apportioned to it by the National Association, which apportionment will be established on the absolutely fair basis of the membership in each association. The National Association will thus not only fulfill its grander purpose of combining the forces of local bodies for the securing and maintaining of better relations and conditions in all departments of the building business, but will also provide opportunity for its children (the filial bodies) to reap a financial benefit, which, though denied to itself, it can secure and continue to them perpetually, through the machinery which its own existence creates, and which will only cease to be available when the filial bodies neglect the central body. A complete system is offered, similar to that of the human body, where the heart sends the life-blood throbbing to all the extremities, strengthening and building all the way, and is itself renewed and strengthened for its work, continually, by the return of vigor and life to the central reservoir.

This will be an appropriate place to say a word or two in relation to the administration of the affairs of the National Association. The time is near at hand (I think it has already come) when the amount of labor to be done in the various departments, particularly under the new dispensation to which I have just referred, will demand larger and better working forces, amply paid for their service. Your present secretary long ago reached the limit of his ability and endurance. The demand has proved so varied and exacting that it has been a physical as well as a mental impossibility to meet it. No one man, in my opinion, can carry all the burden and responsibility, together with the increase sure to come, and the man for the arduous duties of the secretary's position, in the new regime (which should be immediately established), must be endowed with peculiar qualifications, which I am conscious that I do not possess. I may have served well enough as an organizer, as an "apostle" (as I believe I was once called in Chicago), but a bigger and an abler man is needed for the great future that lies before this association. Pick him out now, at this convention, in order that he may become familiar with the work already under way, and prepare for the larger and newer work to come.

I desire to suggest, just here, something which has frequently been in my mind, but to which I have never given utterance. I think we shall find in the future that the annual convention is not sufficient for the needs of the association; and, for the purpose of bringing the principal officers into closer relations with the constantly increasing constituencies, for the purpose of more frequent consultation and counsel, I recommend that there be a mid-year meeting of the officers, directors and standing committees. I am strongly of the opinion that this will be a wise move.

It is hard to find a place to close such an effusion as this, which advertises itself as a "report," and yet wanders off into the domain of the president and all other existing departments with the utmost freedom; but it must be accepted as the peculiar product of a peculiar combination of circumstances and responsibilities, no portion of which could be avoided or neglected in order that the proper amount of information might be imparted.

I cannot conclude without reiterating my opening statement that the work of the association has but begun; that few of us have, as yet, more than the faintest conception of the amount of beneficent opportunity before it, or comprehend in our vision more than a fraction of the thousands of special questions which need the careful investigation and thoughtful development which only time, experience and persistence can secure.

This congress of builders is to mean in the future as much to the business which we represent as the United States Congress does to the larger and more varied interests of the nation, doing for us what no other general form of government or direction can. We should constantly and earnestly study its principles, and consecrate our best efforts to secure the establishment of its practices, so that we may not only make it of inestimable value to ourselves, but may leave it as a rich legacy to those who come after us.

The President: The report of the treasurer is next in order. George Tapper, of Chicago, made the following report:

Mr. President and gentlemen of the National Association of Builders: I herewith submit my report as treasurer for the year ending January 27, 1890. Condensed report: Cash on hand as per report last annual convention, $3.33; receipts from 26 exchanges on pro rata assessment of $2 per capita, $5,816; received from 5 exchanges, admission fees, $75; receipts for additional pamphlets, $5; total, $5,894.33.

Per contra: Salary of secretary, $3,000; printing, $1,366.69; traveling expenses of our secretary, $473; stenographic report of third annual convention at Philadelphia, $121; stenographer and typewriter, $422; postage, telegrams and stationery, $370.39; collecting to checks, $1.90; total disbursements, $5,753.98; balance on hand, $145.35.

Respectfully submitted,

GEORGE TAPPER, *Treasurer.*

On motion, the reading of a detailed report was dispensed with, and the treasurer's report as read was accepted.

George C. Prussing, chairman of the Committee on Uniform Contracts, presented the following report, which was adopted:

REPORT OF COMMITTEE ON UNIFORM CONTRACTS.

*To the National Association of Builders:*

The "Standard Contract" was adopted in June, 1888, by a joint committee representing the American Institute of Architects, the Western Association of Architects, and the National Association of Builders.

Aside from the fact that the copyright of the form adopted has been taken in the name of the joint committee, constituting it a body corporate, each association represented recognized the necessity of lodging authority somewhere to review, change and amend said form as imperfections might be perceived and the necessity of amendment acknowledged. Hence each convention made the Committee on Uniform Contracts one of its standing committees, and criticisms and suggestions for improvements were invited by the chairman of the three subcommittees; each from members of the body by him represented.

Numerous communications, comments and suggestions have been received, some valuable, some impractical. All of them have been preserved, all carefully considered, and for each your committee does hereby desire to return its thanks. Only by full and fair discussion, and the compilation of our experience and the decisions and interpretations of courts, wherever made—in short, by the active coöperation of all—can we hope to approximate perfection. In the nature of things this discussion, hereby cordially invited, must be by written communication to your committee, so that it may be properly presented to the joint committee when assembled.

The form remains unchanged as yet, because in the judgment of your committee no changes, except for weighty reasons, should be made—for a time at least. The uniformity of the instrument, the fact that it is the "Standard" form, is its greatest strength and value, and this might possibly be impaired by frequent or trivial changes in its text.

The unprejudiced acknowledge the fairness and even-handed justice of its provisions to both parties to the instrument, the owner and the builder. The definite acknowledgment and appointment of the architect as agent of the owner defines his position clearly and unmistakably; takes it out of the realm of misty speculation and uncertainty, so often indulged in heretofore, which has proved so fruitful of lawyers' arguments and efforts to befog courts, until quite a number of architects are seriously in doubt as to their relation to the parties.

But perhaps the best comment on the work of the joint committee is contained in the report of the publishers that thus far 70,000 copies of the "Standard Contract" have been used, and that sales are increasing.

While apparently large, the sales are not what they should be, and doubtless will be, when the builders of this country fully realize the advantage the universal adoption of a uniform contract will be, and that they, as a party to the contract about to be executed, have a right to the choice of form. Time and a greater familiarity with its provisions, through articles and discussions in that most valuable auxiliary, the *Builders' Exchange*, edited by our untiring co-laborer for the advancement of the builder, Mr. W. H. Sayward, of Boston, will doubtless bring it into greater and ever-increasing demand. Indeed the value of a publication of this kind, discussing fully and fairly all matters of interest to the builder, wherever his domicile, and reaching him regularly, cannot be overestimated.

Since our last convention, one of the organizations represented in the joint committee has ceased to exist.

Your committee sent the following letter:

CHICAGO, December 13, 1889.

*John W. Root, Esq., Secretary American Institute of Architects, Rookery, Chicago:*

DEAR SIR,—The value of a "Uniform Contract" to all engaged in building—architects, owners and contractors—is acknowledged throughout the country.

Its present form was adopted by a joint committee in June, 1888, in the city of New York, consisting of nine members, chosen, three each, by the American Institute of Architects, the Western Association of Architects and the National Association of Builders, and the recognition of its merits is attested by the rapid introduction of the form.

Well aware of crudities in our work, and recognizing the importance of constantly existing machinery for its perfection, the committee reported to the bodies by them represented in favor of a standing committee on uniform contracts, to be called together at any time the necessity of amendment or alteration might appear. In this way both architects and builders would know to whom to address at any time their suggestions for changes, and this feature to my mind is one of great importance.

At Cincinnati, in joint convention assembled, the American Institute and the Western Association amalgamated into one national association, to be known by the time honored name of the American Institute of Architects.

Knowing the value of an association with annual conventions in which the profession of the entire country is represented—in which all may be heard for the benefit of the whole—allow me to offer my hearty congratulations to this happy consummation.

The Board of Directors of the Institute, we understand, has ample powers to appoint a committee on uniform contracts to act with the standing committee appointed by the National Association of Builders.

Allow me to suggest the propriety of the early appointment of such committee. Not that I am aware of the necessity of immediate action on the part of joint committee, but to preserve and perpetuate the joint committee a living organism.

A committee of six, three from each profession, may be large enough, but should in the judgment of your Board of Directors a larger number be more desir-

able, please to notify us to that effect, and our next convention, to be held in St. Paul on January 27, 1890, will appoint an equal number.

Very respectfully yours,
(Signed) GEORGE C. PRUSSING,
*Chairman Committee Uniform Contracts, National Association of Builders.*

To which the following reply has been received:

AMERICAN INSTITUTE OF ARCHITECTS.
OFFICE OF THE SECRETARY,
"THE ROOKERY," CHICAGO, January 10, 1890.

MY DEAR SIR,—The president has appointed as the committee on uniform contracts the following gentlemen: Mr. O. P. Hatfield, Chairman, 31 Pine street, New York; Mr. Alfred Stone, 65 Westminster street, Providence, Rhode Island; D. Adler, Esq., Chicago.

Truly yours,
*To George C. Prussing, Esq.* (Signed) J. W. ROOT, *Secretary.*

Respectfully submitted,
GEORGE C. PRUSSING,
JOHN J. TUCKER,
A. MCALLISTER,
*Committee on Uniform Contracts.*

The chairman of the Auditing Committee made the following report, which was adopted:

*To the Officers and Members of the National Association of Builders:*

GENTLEMEN,—We, the committee appointed at the last convention to audit the accounts of the treasurer, have examined the same with the vouchers and have found them to be correct.

Respectfully,
J. MILTON BLAIR,
W. H. GORSLINE.

The President: The next in order is the report of special committees. Under that head comes the report of the Builders' Surety Company, A. McAllister, chairman.

The report of Mr. McAllister was then read by the secretary, as follows:

REPORT OF COMMITTEE ON BUILDERS' SURETY COMPANY.

Your committee, appointed at the last convention to encourage the establishment of a company for the purpose of giving securities on builders' estimates and contracts, desire to report:

That they find that several trust companies, already formed, have incorporated this idea in their business—are advertising it as an essential feature—and have asked the indorsement of the local organization of builders in the cities where they exist. This indorsement has been refused on account of their system not being, in the opinion of our local organizations, what is desired.

We find that these companies require a "back bond," and are thus asking and receiving pay without assuming any risk. In addition to this, they are very limited in their scope, and must, necessarily, always be so, as they are local in their character, and have no means of securing proper and reliable information over the wide area comprehended in the affiliation of the National Association; and any company to receive the valuable aid and assistance of this body should be national in its character and capacity.

Your committee also find that a new company is in prospect of being formed upon the proper basis, namely, giving security for a stipulated charge without asking for a back bond. The promoters of this company have encountered many obstacles, the chief of which being to secure the support and coöperation of builders themselves. To obtain this support they have come to the conclusion that, in organizing and operating, it will be absolutely necessary for them to adopt such plans and methods as will commend the company to the favorable opinion of the National Association and all its affiliated bodies. This proposed company seemed to your committee to offer opportunity for encouragement in the line of the order of the last convention under which they were appointed, and they have accordingly entered into consultation with its promoters, who, by the way, are all builders, and have proposed certain methods, which, if approved by this body, will no doubt form the basis of a company for the purpose named, which shall be national in its character, shall be under the guidance of this association, shall give each filial body a share in management and profits, and shall be in theory and fact a *builders'* surety company, managed and composed exclusively of builders.

It has been evident from the start that the National Association was not itself a body competent to enter into financial relations with any enterprise of this character, and yet the peculiar connection which it holds with its filial bodies, provides it with an opportunity to assist in the operation of such a company, so comprehensive and superior, so entirely unattainable by any other association or combination, that your committee has never for a moment been dismayed by the difficulties of their task, but, being stimulated by the great benefits to accrue to the individual builder, to the filial bodies and to the *National Association* (the connecting link which makes all possible) have determined to seek persistently for a feasible method of utilizing the opportunity and finally setting this valuable machinery in operation.

Your committee does not claim for the plan now presented, complete perfection in all its details, but does believe that it offers the principal features of a practical method by which the undertaking may be properly encouraged and supported through the National Association to the definite financial benefit of individual filial bodies, as well as of the central body, thus serving as a powerful factor in consolidating and strengthening us in our efforts for the general betterment of our condition, for which primarily and finally this organization was formed.

The plan which the committee offers and asks the association to adopt is as follows:

The National Association to say to the promoters of this enterprise: We will aid and assist in the establishment and operation of this company, will open up the avenues which we control, and offer every advantage which our connection with many widely separated local associations of builders affords, provided the following general propositions are assented to as substantially the basis upon which the company shall be organized and operated, these propositions to be subject to modifications by the committee in charge, said modifications not to impair the general intent and purpose therein and herein set forth.

1. The title of the company to substantially cover the fact that it is a Builders' National Insurance, Security and Guaranty Company, and that it is under the patronage and direction of the National Association of Builders.

2. Its stock to be limited to, say, 250,000 shares, at a par value of, say, $4.00 per share.

3. These shares of stock to be issued only to members (either active or honorary) of bodies affiliated with the National Association, and, if found practicable, to the said filial bodies themselves, thus insuring a holding composed of contractors in the various building trades or persons engaged in similar pursuits.

4. At least 100,000 shares to be held in trust to allow for apportionment as follows:

Each filial body of the National Association which maintains its connection therewith by payment of the yearly dues required by that body, to be allowed and apportioned on the books of the company, stock at the rate of five shares for each member of the said filial body, as shown by their payment of per capita assessment to the National Association, the same to be adjusted annually.

This apportionment to be without payment of the value of the stock by the said filial bodies, but the certificates of said stock to be held in trust for their benefit.

Dividends accruing on the stock thus apportioned to filial bodies, to be paid over to them through the national treasurer.

5. Filial bodies in good standing, which are so incorporated as to permit them to hold personal property to be permitted to purchase and hold stock, if any be available, in addition to that apportioned as above mentioned, limited in extent to an equal number of shares to those so apportioned, upon condition that said shares be non-transferable, and that upon failure to maintain their standing in the National Association, they to relinquish the said shares to the said company at a price not greater than that paid for the same.

6. The board of directors of the company to always include the directors of the National Association named at each annual convention by the filial bodies, as their representative.

7. The officers of the company to always be members (present or past) of filial bodies of the National Association.

8. There to be a central department of the company for the general conduct of its business under the direct management of its president, general secretary and treasurer; there to be also departments with definite territory and jurisdiction, each managed under the general laws and rules of the company, through a vice-president as head of the department.

9. In the arrangement of rates of premium to parties applying for insurance or bonds, an appreciable difference to be made in favor of those who may be members of filial bodies.

10. The books and affairs of the company to be open at any and all times to the inspection of a regular standing committee of the National Association appointed annually for that purpose.

Your committee thus roughly states the principal points which it deems necessary should be secured to the National Association and to filial bodies thereof, in return for the vast advantage which any company formed for this purpose would receive through the opportunity to utilize the relations and connections which we have established between associations of builders and their members all over the country. But it is well aware that the development of the scheme which these propositions include is a matter which will involve careful study and skillful treatment with the aid of expert advice of the highest character, before the establishment of the proposed company can become a fixed fact. It, therefore, further asks the association to continue the committee which has undertaken the matter thus far, as a "standing committee" of the association, for the purpose of securing the establishment of this company on the lines now proposed, and otherwise regulating its method of organization so that the best interests of the National Association, *its filial bodies and their members*, may be preserved.

In concluding their report your committee wish to say that with deeper investigation of this problem its members have become more thoroughly than ever convinced that immense benefits are to accrue to all, from the setting up of a company of this kind, under the guidance and direction of the National Association, with the great opportunities which it alone can offer.

Beside the principal business which was first suggested, that is, giving sureties or bonds on estimates and contracts freeing the individual from the embarrassing necessity of importuning his friends to go on his bonds, which in itself is worthy of all that has been said, returning, as it surely will, very handsome dividends from this alone, your committee can readily see that it will be perfectly competent also for this company to secure a charter so that insurance on builders' risks, as well as risks of accident to workmen or the public, will be comprehended in its field of operation, it may act also as a trustee and guarantor between owner and builder. Builders, through a company thus established, will be enabled to insure themselves and each other, and receive the profits themselves which now fall into the hands, either of foreign corporations, or corporations in which the builder reaps little or none of the financial benefit.

To the eyes of the committee the opportunity is inconceivably great; it belongs to us more than to any others. We happen to be thrown, through the connection established by our central body, into a position where we can handle such business with a facility and certainty that no outsiders can possibly obtain. We furnish the whole apparatus for perfect operation through experience in the business of building, through our existing organizations and the ready channel of information they offer; and besides this, in case of any failure of individuals to carry out their contracts, instead of being obliged to go to outsiders to repair the breach, we, being builders, can repair it ourselves at a minimum cost, and sometimes can turn even an apparent loss into actual profit.

Your committee commend this matter to the convention as one of the most complete and satisfactory of undertakings, one that they believe will surely result in vast benefits—benefits appreciable in the easier conduct of the contractors' business, in the security of the public, in the strengthening of the National and all filial bodies, financially and every way.

If this report be approved by the convention, your committee ask the adoption of the following resolution:

*Resolved*, That the committee on Builders' Surety Company be and is hereby continued as a standing committee, and is instructed to secure, as soon as possible, the establishment of a company based upon the general plan and conditions outlined in this report.

Respectfully submitted,
A. MCALLISTER, Chairman,
GEORGE C. PRUSSING,
J. MILTON BLAIR,
EDWARD E. SCRIBNER,
JOHN J. TUCKER,
JOHN S. STEVENS,
WILLIAM H. SAYWARD,
*Committee.*

The President: Gentlemen, what will you do with the report of the Committee on Builders' Surety Company?

Richard Smith, of Omaha: I move that it be accepted.

Considerable discussion ensued upon the significance of the adoption of the report of the association, and the report was finally received and approved and made the special order of business at 3 o'clock the following day.

A short intermission was here taken; thereupon the president introduced to the convention Mr. Richard Deeves, who read a paper entitled, "The National Importance of the Industrial Education of the Youth of the Country." (Printed on page 6.)

The paper was received with marked approbation.

Mr. Ittner: Mr. President, I rise to move a vote of thanks to Mr. Richard Deeves, of New York, for the able, manly and courageous paper he has just read.

The motion was seconded and carried.

The president then announced the appointment of a committee to appoint time and place of next convention, and to nominate officers for the coming year, as follows: Richard Deeves, of New York; Robert H. Jenks, of Cleveland; Richard Smith, of Omaha; Daniel Evans, of St. Louis; and W. R. Stoughton, of Pittsburgh.

On motion the session adjourned.

## SECOND DAY—MORNING SESSION.

The convention assembled at the Chamber of Commerce Building and was called to order by President Scribner at 10 o'clock A. M.

The roll was called and several announcements were made by the secretary.

The president then called for the report of the Legislative Committee, which is as follows:

ST. PAUL, January 28, 1890.

*To the President, Officers and Delegates of the Fourth Annual Convention of the National Association of Builders:*

GENTLEMEN,—Your Legislative Committee would respectfully report that during the year they have reviewed the actions taken by them on various subjects that have been in their charge in previous years and have no modification nor improvements to suggest, although further experience may show that there are opportunities for improvement. Your committee would ask authority from the National Association to present the following memorial to the congress of the United States:

WHEREAS, The Supervising Architect of the Treasury Department has been unable as heretofore to furnish plans and specifications of the various public buildings to be constructed to the builders' exchanges; therefore, be it

*Resolved*, That the National Association of Builders, in convention assembled, respectfully petition congress to authorize the Secretary of the Treasury Depart-

ment to furnish the building exchanges in the various cities with the plans and specifications of all public work, for the purpose of enabling their members to estimate and submit proposals for the same.

Respectfully submitted by the committee.

MARC EIDLITZ,
WM. HARKNESS JR., } *Committee on Legislation.*
E. L. BARTLETT,

Mr. Sayward on behalf of the Executive Committee spoke at length regarding the report, and concluded by stating that, should these recommendations, or this recommendation, be finally adopted, after liberal discussion by the convention, the committee would suggest the adding of the following paragraph:

The National Association again declares that its purpose is, and always has been, not to interfere with or attempt to control or dictate to its affiliated bodies in any of their specific action, on the assumption that they are the best judges of the situation and conditions which surround them, but it desires always to give its membership the amplest opportunity for information upon all subjects in which they are concerned and in which the experience and judgment of each may strengthen and benefit all in the setting up of a general policy for the guidance of all.

Mr. Sayward said that before discussion on this main proposition was opened, the Executive Committee desire that there be an expression from each and every city as to the existing conditions in their locality, and their views as to the effect of any reduction or increase in the hours now prevailing, each city to be called upon in alphabetical order, which the president, I understand, will now proceed to do.

After some further discussion the secretary called the roll by delegations, with a result as follows:

BALTIMORE, MD.— W. J. Bevan: Mr. President, I would like to add to the report from Baltimore that the millmen and ironmen work ten hours, and are paid by the day.

BOSTON.—Mr. Sherry: Boston two years ago inaugurated the nine-hour system. Payment by the hour.

BROOKLYN, N. Y.—W. L. Glidden: Nine hours per day, and paid by the day.

BUFFALO, N. Y.—E. M. Hager: Mr. President, in Buffalo we work, as a rule, nine hours a day in all places except in shops—any place where there is machinery at work. All other trades work nine hours per day, and are paid by the day, with the exception of about one-quarter of the carpenters, who are working ten hours up to date; but all the rest, three-quarters, work nine. The sentiment of the exchange emphatically questions the eight-hour system.

CHARLESTON, S. C.—Not represented on the floor.

CHICAGO, ILL.—D. V. Purington: Bricklayers, stonemasons, stonecutters, plumbers, plasterers, and about one-third of the carpenters eight hours for a day's work. One-third of the carpenters and painters eight hours. The balance of the carpenters and painters nine and ten hours per day. Cast-iron men, marble-men and all men employed at mill and factory, ten hours for a day's work. Payment universally by the hour.

CINCINNATI, OHIO.—J. Milton Blair: Mr. President and gentlemen, the mechanics of the different building trades of Cincinnati are employed by the hour and paid by the hour. The prevailing hours for a day's work, on all days of the week except Saturday, are nine hours, with the exception of about one-quarter of the carpenters and all the planing-mill men, who work ten hours for a day's work. On Saturday eight hours is the limit of time for a day's work. Paid for by the hour.

CLEVELAND, OHIO.—A. McAllister: Matters are decidedly mixed in the matter of hours. The stonecutters work eight hours universally. The bricklayers and stonemasons work nine hours universally. The plasterers work nine hours. All the carpenters, and, I think, nearly all other mechanics of the building trades, work ten hours. Stonecutters and masons are paid by the day; the carpenters pretty universally by the hour. That, I think, answers the question.

DENVER, COL.—A. S. Ripley: I will state we are considerably mixed in Denver. The stonemasons work eight hours universally. Plasterers and some other trades, painters and carpenters, are working nine, with the exception of the millmen. The millmen work ten. The ironmen work ten, and the city, as a general thing, is about equally divided. The outside men, what we call the outside carpenters, work nine; inside (that is, in the shops) ten. Paid by the day.

DETROIT, MICH.— W. J. Stapleton: In Detroit we work nine hours, and, as a rule, by the hour, with the exception of stonecutters; they work eight hours, and the stonesetters work nine. All the mills run ten.

EAST SAGINAW, MICH.— John H. Gualmann: The outside men work nine hours, paid by the day.

GRAND RAPIDS, MICH.— John Rawson: With the exception of stonelayers, bricklayers and plasterers, all trades work ten hours per day. Those three mentioned work nine hours. Invariably, all trades are paid by the hour.

INDIANAPOLIS, IND.— J. C. Adams: In the city of Indianapolis the building trades, with the exception I believe of a few stonecutters, work nine hours— the usual day's work. Those engaged in planing mills, factories and machine shops work ten hours. The payment is by the day generally. Nine hours for building trades, with the exception of possibly the stonecutters, and perhaps I might say with the exception of a few carpenters who work ten hours. But, generally, nine hours is a day's work, and they are paid by the hour.

KANSAS CITY.— W. W. Taylor: The bricklayers and stonecutters and plumbers work nine hours, and are paid by the hour. All other branches (mills and everything) work ten hours; but some of them pay by the day, and some by the hour.

LOUISVILLE, KY.—Samuel P. Snead: Mr. President, I would say that at Louisville in all the departments of work ten hours, except bricklayers, and they work nine. Some pay by the hour, and some by the day.

LOWELL, MASS.— John A. Coggshall: The carpenters for nine months in the year work ten hours; for three months they work nine hours. The brickmasons and stonecutters work nine hours. Carpenters, brickmasons and stonecutters are paid by the hour. All other trades and all operatives in mills run by machinery work ten hours, and are paid by the day.

MILWAUKEE, WIS.— Garrett W. Dunck: Mr. President, in Milwaukee the masons and stonecutters, about three-quarters of them, work eight hours a day; the other quarter works ten. Painters, carpenters and various other trades work eight, nine and ten hours, and are hired by the day and by the hour.

MINNEAPOLIS, MINN.— Herbert Chalker: In Minneapolis the stonecutters work eight hours a day, and are paid by the hour; the stonemasons work nine hours a day, and are paid by the hour. The bricklayers work nine hours a day, and are paid by the hour. The painters work nine hours a day, and are paid by the day. Plumbers work nine hours a day, and are paid by the day. All other days' work, ten hours a day, and are paid by the day.

NEWARK, N. J.— Not represented on the floor.

NEW HAVEN, CONN.— Not represented.

NEW YORK CITY—Marc Eidlitz: In New York City the stonecutters work eight hours and are paid by the day. Carpenters, plasterers and ironworkers, plumbers, gasfitters, steamfitters and derrick men, also granite, bluestone and marble men are working nine hours, and are paid by the day. Saturdays eight hours in all cases. Stonemasons and bricklayers work nine hours per day and are paid by the hour. Brickmasons and stonemasons work only eight hours on Saturday, but they are only paid by the hour for eight hours.

OMAHA, NEB.—G. J. Le Veille: Stonemasons, nine hours; bricklayers, nine hours (eight hours on Saturday); plasterers, eight hours; carpenters, about half nine hours and half ten; plumbers, nine hours; stonecutters, eight hours. All, or nearly all, paid by the hour, and nine hours per day among all our trades. All millmen of our city are working ten hours; also paid by the hour.

PHILADELPHIA—Stacy Reeves: Mr. President, in Philadelphia nine hours is the prevailing day's work, paid partially by the hour and partially by the day. There are exceptions, of course, to the nine-hour rule, but that is the general standard of a day's work among all the branches. The only branch that I now think of working shorter hours on Saturday are the stonecutters. Millmen work ten hours and are paid by the day.

PORTLAND, ME.—A. D. Smith: Plasterers, nine hours; all others work ten, paid by the day.

PITTSBURGH—Samuel Francis: Stonelayers, stonecutters, bricklayers, carpenters and painters work nine hours, except on Saturday, when they work eight. Paid by the hour, generally. Millmen and the other trades nine hours per day, paid by the day.

PROVIDENCE, R. I.—James S. Hudson: Mr. President, the statute laws of the State of Rhode Island fix the hours of labor at ten. Carpenters, masons, painters, all mill operatives and all other mechanics, with the exception of plasterers and stonecutters, in our city work ten hours. Plasterers and stonecutters have established for their union nine hours as a day's labor. They are all paid by the day.

ROCHESTER, N. Y.—J. H. Grant: Mr. President, all masons, stonecutters and plasterers work nine hours and are paid wholly by the hour, there being no reduction of hours on Saturday. Carpenters, nine hours. The millmen work ten hours, usually, although there are exceptions to that. Plumbers, nine hours, and are paid by the hour; painters, nine hours, and, I believe, paid by the day; marble workers, ten hours; iron workers, ten hours. All laborers, ten hours, paid by the hour, almost universally.

ST. JOSEPH, MO.—John De Clue: St. Joseph, loyal to the National Association in its recommendation that we adopt the hour system, did so last season, engaging by the hour and paying by the hour. Plumbers and stonecutters have been working for a year or more eight hours per day. All other trades ten hours up to the present time, excepting during the short months of winter, when some shops have cut down to eight and some to nine, but pay by the hour the same as in the summer time.

ST. LOUIS, MO.—Daniel Evans: All mechanics working on buildings on the outside and inside are working eight hours, with the exception of plumbers and tinners, who are working nine hours; all paid by the hour. A few carpenters work nine and some ten. Millmen, factorymen and foundrymen, etc., are working ten hours, and are paid by the day, though some are paid by the hour.

ST PAUL, MINN.—T. A. Abbott: The St. Paul stonecutters work eight hours a day; brick men, plumbers and plasterers work nine hours a pay; carpenters, millmen, painters and stonemasons work ten hours a day. Payment is by the hour.

SIOUX CITY, IOWA—F. F. Beck: Sioux City works ten hours universally, except Saturday, which is nine hours. but we pay by the hour. In the winter we work nine hours, but it is universally paid by the day.

SYRACUSE, N. Y.—Henry T. Crawford: Mr. President, in Syracuse the bricklayers, plasterers, stonemasons and stonecutters work nine hours a day. Carpenters, tinsmiths, plumbers, painters and shop people work ten hours a day. Payment by the hour all around.

WASHINGTON.— Thomas J. King: All mechanics employed in mills for the manufacture of building material and mechanics employed in the construction of buildings work nine hours per day, with the exception of stonecutters who work eight. All mechanics are paid by the hour, with the exception of the plumbers who are paid by the day.

WHEELING, W. VA.— G. W. Beggs: Mr. President, I am here, I presume, to represent the entire state. I am from the city of Wheeling. I will state that the bricklayers of Wheeling work nine hours. They are paid by the day. The carpenters of the city of Wheeling work nine hours, and are paid by the day. The plasterers of the city

of Wheeling work nine hours, and are paid by the day. The governors of West Virginia work the whole year round. In our blast-houses and rolling-mills (which is identical probably with our Pittsburgh people) they work by the piece, and probably work ten or twelve hours. The nailcutters and sheet-rollers work by the piece, and have nothing to do with labor organizations in regard to the hour system.

WILMINGTON, DEL.—A. S. Reed: The bricklayers, stonemasons and a small portion of the plasterers work nine hours. They are paid by the hour, and a very small proportion of our carpenters last year worked nine hours. I think, likely, some of them this year. The balance of the crafts engaged in the building business work ten hours. They are paid by the day.

WORCESTER, MASS.—H. W. Eddy: The carpenters, millmen, painters and plumbers work ten hours. About two-thirds of the bricklayers and masons work nine and the balance ten. They are paid usually by the hour.

The President: Now, gentlemen, having called the roll, we have the information asked for, for which we are very much obliged. If any gentleman now wishes to make a motion affecting the recommendation of the Executive Committee, it is in order.

Marc Eidlitz: Mr. Chairman, I move that the resolution offered by the Executive Committee be accepted and be adopted as the sense of this convention.

The motion was seconded by Mr. William Harkness Jr., of Philadelphia.

Thomas King, of Washington: Mr. President, I move, as a substitute for the motion by the gentleman from New York, that this report of the Executive Committee be referred back to that committee for further consideration.

Mr. Beggs, of Wheeling: Mr. Chairman, I second that motion, and to report tomorrow.

Mr. Adams, of Indianapolis: Mr. Chairman, the motion of my friend on the left (Mr. King) is too indefinite. The suggestion offered by the seconder of the motion, that we report tomorrow, was not accepted by Mr. King, and if Mr. King desires to postpone the further consideration of this matter it should be embodied in the form of a motion that further consideration be deferred for one year. Practically his motion would kill the whole business, and it is obvious to us all that it would be rather a summary way of disposing of it. This convention, I take it, is composed of men of courage; they are not cowardly in assuming any responsibility that may come upon them, and are perfectly willing to meet any contingency as suggested in the resolution or the recommendation of the committee in the discussion this morning. We called the members of our organization together in the city of Indianapolis, requesting an expression of feeling—requesting them to give us instructions, if they in their judgment saw proper, in the matter of the eight-hour question, which would be likely to come before this convention. Our exchange is divided, there is a diversity of opinion. No general judgment could be attained, and they sent their delegates here uninstructed and unadvised. Personally I entertain opinions possibly different from those of most members of our exchange. Mr. Chairman, as I look around this room I see men who have not attained their present position by fortuitous circumstances, but by their own energy, industry and their adaptation to their business, and I believe that the time is not far distant when the question of eight hours for a day's work will be upon us, and in a manner that we cannot refuse to recognize. We may as well take hold of it as men and express our judgment. I, for one, am prepared to say, and am willing to say (individually only, not for my colleagues that are with me this morning), when time shall have adjusted the relations of employer and employé, and when all the different conditions shall be so brought into shape that we can satisfactorily give our employés compensation for eight hours, I am ready for the change. (Applause.) For myself, Mr. Chairman, I began life working ten hours, and you may say from sun to sun, and to me, just now, eight hours is a very long day's work. (Applause.) We must meet this question as becomes our employés. Their interests are ours and ours are theirs. And I am sorry that the impression has gone forth and the idea has prevailed, not only among the builders of this country, but it has been set forth in the press of different sections of the republic, that there is an antagonism existing between the employer and employé. With my men, in the corporation I am connected with, there is none. There should be harmony and good feeling; we should meet them as men, we should meet them and confer with them and unite and agree upon methods that should be advantageous to us all. (Applause.) Now, Mr. Chairman, there should be no division of judgment as to the fact that we are all mutually interested. There should be a concession, not on one side only, but a compromising of conditions and an agreement upon certain relations that would benefit us all. Further, I desire to say, before taking my seat, that I am glad the secretary of the association made an explanation of the reason why this matter was brought up before the convention. The *News* of our city, one of the largest newspapers in circulation in Indianapolis, had a notice the day before the delegation left that the delegation to the National Association in St. Paul would leave for St. Paul to make preparations to fight the eight-hour movement. Now, Mr. Chairman, there is no disposition in this convention to assume that position. We do not propose to fight the eight-hour movement, we do not propose to put ourselves in opposition to the eight-hour movement, but we must get ready to assume those relations which will be upon us sooner or later. (Applause.)

Mr. Purington, of Chicago: Mr. President, I did not desire to take any part in the discussion at this time, but I would like to ask Mr. Adams one question, Whether, in view of what he says in reference to the ideal relations that should exist between employers and employés, he is willing, at this time, or at any time, to accept dictation either from the National Association or from the filial bodies which this association is composed of, as to what those relations shall be.

Mr. Adams: Mr. Chairman, I will answer my friend Mr. Purington by saying that if the National Association recommends, and the filial bodies of which we are members shall see fit to acquiesce in their recommendation, I will endeavor so to adjust my business as not to be the loser when that final adjustment is made, and get ready for the change.

The President: The chair would like to ask, for information, as to the full meaning of Mr. King in offering his substitute.

Mr. King: Mr. President, I wish to state my position on that motion. It was this, that in our section of the country (I speak of *our* section: I include numerous cities within a radius of a hundred miles or more) we do not desire a discussion of this question. We will meet all emergencies when the time comes. We are prepared to adjust our business to suit the amount of money that our customers propose to pay for their work; if they are willing to pay us a sufficient sum of money to pay for six hours of labor a day, we are only too glad to accept it; on the other hand if they give us only a sufficient amount to enable us to employ labor for ten hours a day, we will employ men for ten hours, and we will adjust our business to the amount of money that is at hand to be expended in building. The object I had in offering this substitute was that I felt, after consultation with various other exchanges, that it was a question that better not be brought up at this time; and in view of the fact that statistics have been gathered here from the various exchanges, I felt that the Executive Committee would necessarily have to go over those statistics, and that it might possibly occupy a week or ten days; therefore this question could not come up before this convention, but possibly would come up before the Executive Committee at their semi-annual meeting, as recommended in the national secretary's report.

After some further discussion Mr. King's substitute was voted upon and lost by a vote of 45 to 51 and the original motion of Mr. Eidlitz was taken up.

George C. Prussing, of Chicago: Mr. President, I hope that every man here will speak to the question. As my friend from Indianapolis, Mr. Adams, said, this is not a question to be shirked. It is upon us. It has been introduced at the cost of the employers in various cities; it will be introduced, in my judgment, everywhere. It is, I think, the inevitable, and you as builders, gentlemen, had better take a position upon that question. It is to your pecuniary interest to help along the establishment of the eight-hour day, as I take it. (Applause.) Provided you are, as I am, convinced that, sooner or later, that system of working will be adopted throughout this land. If we agree upon that, gentlemen, establish your system of payment by the hour, and the sooner you get out of the woods, the better for you as contractors and builders. (Applause.) If I had any hesitancy at all of speaking on this question, or of doubting the wisdom of its introduction, it was because I as a contractor am not primarily interested. In other words, that I am merely interested as a component part of the body politic. The extra cost of building (for it will enhance the cost of building) does not come out of my pocket as a builder, it comes out of the pocket of the gentleman who contemplates the erection of a structure; and whether under the eight-hour system or the ten-hour system, or any other system that you may suggest, he will take his estimates, carefully consider them, and after such consideration make up his mind whether to erect that structure or not. He does that now, he will do it then. The entire public is brought together, it is an economic question for the entire country to settle, and it might (and I was afraid that it might) look presumptuous in us to advise the entire body politic on what concerns them at least as much as us; but we come together here annually as a sort of experience meeting, and let us talk out on the subject. As builders I am free to say that it is to our interest that this constant agitation, this struggle for the establishment of the eight-hour system should end as speedily as possible. (Applause.) And Mr. President and gentlemen, this question came to us in Chicago in 1886, and with your permission I will read a letter (a short one) which states exactly how it was met there. This refers only to masons and bricklayers, but I think perhaps it is to the point.

*To the Officers and Members of Bricklayers Union, etc.:*

GENTLEMEN,—Your communication of December, 1885, advising us "that on and after May 1, 1886, the United Order of American Bricklayers and Stonemasons will adopt the eight-hour system of working at the same rate per hour (40 cents) as now paid," has been received and placed on file. The right of any man or combination of men to determine how many hours he or they will work, and at what compensation, is undisputed. Upon the wisdom and timeliness of this effort to reduce the productive capacity of the labor of the country by one-fifth, different opinions may be held. Whether such effort will be successful we know not, but feel (and there is the point, gentlemen) *but feel that after twenty years of agitation on the subject, practical trial and demonstration alone remain.*

This was written in January, 1886.

Mr. Deeves, of New York: Who by?

Mr. Prussing: By the Chicago Master Masons' Association. And on May 1, following, every man that handled a trowel went to work eight hours per day at $3.30 for the eight hours, 40 cents per hour, instead of receiving, as he had theretofore, $4, working ten hours a day, and, gentlemen, as far as I am advised, not a brick has ever failed to find its lodgment in mortar because of the change of the system. (Applause.) I say, gentlemen, that it does not pay you, here or anywhere, to fight with your money and your means the battles of the community. (Applause.) And this is an enconomic question that concerns each and all as much as it does you. The contractor has been, heretofore, too ready to put himself between the two millstones, the laboring element on the one part, and the owner, the general public, on the other, fighting with his means, with his energy, at his loss, the battles of the entire community. Whether you have got thanks for it or not, I don't know. In our section we

don't always get it. (Applause.) I should be glad to answer the question that the gentleman proposes.

Archibald S. Reed, of Wilmington, Del. : I did not understand you, when the reports were coming in, that the bricklayers universally worked eight hours. Do I understand that this is the fact, that in Chicago the bricklayers universally work eight hours without any question ?

Mr. Prussing : The only restriction to the universality of it there is the section of country around Chicago. All wielding trowels, be they plasterers, be they stonemasons, be they bricklayers, work eight hours per day, and are paid by the hour. The wages today are 45 cents an hour.

G. W. Beggs : With the permission of the gentleman, will the chairman permit me to ask the gentleman a question ?

The President : Certainly.

Mr. Beggs : In my city (Wheeling), a bricklayer is not permitted to use a trowel unless he belongs to the bricklayers' union, a plasterer is not permitted to work at his trade unless he belongs to one of the unions. I would ask the gentleman from Chicago if that rule applies in his city ?

Mr. Prussing : It does. The bricklayers' union controls every trowel that spreads mortar on a brick wall or on a stone wall, because they are amalgamated. The plasterers' union controls every trowel that puts mortar on a wall. The bricklayers' union two years ago (I don't know what the numerical strength is now) had to exceed four thousand men. That is a statement of fact. Now, gentlemen, the point that I wanted to make is that we ought, as men, to take some position on this question. Being that it has been introduced, you cannot today afford to have it thrown up to you that you shirked ; that you dared not discuss the question when once introduced. The Indianapolis *News*, my friend Adams says, heralded to that section of the country that Mr. Adams and his colleagues came to St. Paul in order to make preparations, through the organism of the National Association, to fight the eight-hour day. The eight-hour day has been mentioned on this floor. Now, gentlemen, I take it that you will have full and fair discussion ; and if you are of the same opinion that I am, that its establishment is but a question of time, but inevitable throughout the length and breadth of this land, say so. Say so, and prepare yourselves for its introduction, and by establishing everywhere the system of payment by the hour. The resolution, as introduced by our Executive Committee, meets my views very much better than the form of the interrogatory on the programme. Personally, I see no objection to its passage. (Applause.)

John A. Coggshall, of Lowell, Mass. : Mr. President, I would like to ask the gentleman from Chicago a question which his remarks have suggested to me. He just replied to the gentleman from Wheeling that the bricklayers' union of Chicago controlled so many trowels, the plasterers' union controlled so many trowels, and this union controls so many tools. I want to ask the question, who, then, are the employers ? (Applause.)

Mr. Prussing, of Chicago : Mr. President, while the question may not be germane to the subject on hand, as I said before, these conventions are experience meetings, and we may learn although not in the direct line of parliamentary rulings ; with the chairman's permission and the permission of the convention, I will endeavor to answer the gentleman, thinking that it might be profitable, not only to Lowell but other places.

Mr. Beggs, of Wheeling : Even Wheeling.

James W. Bennett, of Lowell, Mass. : Mr. Chairman, we from Lowell will thank the gentleman if he can give us any information.

Mr. Prussing : We in Chicago, gentlemen, have suffered for years under the dictation of perhaps the most arbitrary trades union in existence anywhere. As I said before (and I made the statement advisedly), the bricklayers' union controls every trowel that spreads mortar. As a consequence they were the most arbitrary body heard of anywhere throughout the country. How did it work ? Among four thousand men, the majority of them fathers of families, having their little homes, who did not attend the meetings of this union, no hall at their disposal that would contain more than 400 to 500 anyhow, whisky-shops on their road to that hall, those who had very little at stake the regular attendants, the young, the inevitable result was that their action was the most arbitrary and the most insolent ; but when once passed it was the law of the city, and the employer might as well submit. The employer was not organized to meet the dictations of that and other unions. It became so intolerable that organizations among employers were effected, strengthened, and when the last straw was about to be put upon their backs they made a determined stand and they fought a strike which, perhaps, you have heard about, in which in all something over thirty thousand men were thrown out of employment, not only those who originally went on the strike, but a universal lockout through all building trades. It lasted upward of ten weeks. Now, gentlemen, the citizens assisted. All of the building trades came into line, the manufacturers of building materials, the architects, the owners, and we were on the point of beating them when, gentlemen, in order not to have that strike like every other strike heretofore, merely proving that this body or that body is the strongest for the time being, but to gather some results for the future from it, we proposed arbitration to them ; and they, learning wisdom from the acknowledged fact that they were about beaten, consented instead of insisting on their original demands. A committee of five was chosen by each party. They met and selected a presiding officer, granting him the right to cast a vote in case of a tie. They selected for that position a judge, a man looked up to not only in his profession but in every way in our neighborhood, and the result of the week's conference of that original conference committee has been the establishment of a committee of arbitration constantly in session. The principle upon which it was framed was this : That the sum of all employers and the sum of all employés should have an equal voice in the management and arrangement of their trade affairs. (Applause.) Mark it, gentlemen, the sum of all employés and the sum of all employers shall have an equal voice in the arrangement and management of their own trade affairs. That once acknowledged as just and right, naturally laid the lodging of the power of both organizations or the sum of both organizations in the hands of this committee. I want to cut it short, but it is a valuable lesson. I consider it so, gentlemen ; I believe that it is the only practical step toward the adjustment of labor difficulties that has yet been taken. I will not discuss Massachusetts' condition of affairs, and Massachusetts' efforts at arbitration, which I think futile. You must get the mechanic, the man who has the confidence of his own body, of his own union, to be one of the arbitrators, and let the organization of employers appoint those in whom they have confidence upon their part, and let the casting vote, if ever it is required, be lodged in someone, as the rules of this committee say, neither a mechanic nor an employer of mechanics. I want to say, furthermore, that under the presiding guidance of the judge, this committee worked for eight days. We have since that time worked for three years ; we have not called upon that judge to enter our room again ; we don't have to. We became acquainted with one another, and reason and arguments prevailed. Naturally the most conservative were appointed by each body, and when they come together and argue questions, at least with us, we have not had to call upon the eleventh man ever to cast the vote for us. Another thing, a rule of the original conference, or one of the results of the original conference, was that this committee shall be in continuous session, maintained so that the president of each one of the organizations, who, *ex officio*, is a member of the committee, can call the committee together at any time, and that it shall have power to adjust all differences existing between the members of one body and the members of another, or between the members of one body and any one member of another. That work shall proceed continuously pending the decision of the committee. (Applause.) Mark it, gentlemen, mark it, *work shall proceed continuously, both parties agreeing to abide by the decision of the committee when rendered.* The walking delegate who theretofore crooked his finger and every man dropped his trowel and went off of the building, has no place (applause) in Chicago among the masons today. That power is not lodged in any man, or any committee of men, for that matter. Work is to continue pending the decision of the committee, and all questions of that kind are submitted to them. Does the gentleman desire a further answer ? (Applause.)

The subject was discussed by Mr. Ittner, of St. Louis, who asked for further time, and the session adjourned until 2 o'clock P.M.

## SECOND DAY—AFTERNOON SESSION.

The convention met at 2 o'clock P.M. and was called to order by President Scribner.

The roll call was conducted by Assistant Secretary Voshall.

The Secretary : A cablegram has been received, which reads : "Uxsor, Egypt. To E. E. Scribner, of St. Paul. Greetings from Egypt. John S. Stevens " (Great applause.) And also the following from the *Building Journal* of Melbourne, Victoria, Australia :

Hope to have Australia's Builders Association organized. Have read your third annual report from cover to cover. Will reprint your paper on Builders' Exchange in full. Would reprint the whole report in full but space prevents.

The first business for the afternoon session was the discussion of the question, "The Lien Laws : Shall the National Association recommend that they be abolished ?" The discussion was opened by Mr. Prussing, of Chicago, who read the following address :

### G. C. PRUSSING'S ADDRESS ON LIEN LAW (AFFIRMATIVE).

Mr. President and gentlemen of the Convention : To all employed in building, to the owner as well as the mechanic, the contracting builder, the sub-contractor and the dealer or manufacturer of building materials, there is no subject perhaps of as general interest as the lien law. At common law and in equity no lien upon the land can be established by persons making improvements thereon, and no statutes have been enacted in Great Britain to this day securing in any manner to the mechanic or material-man a lien on the buildings their industry or capital has contributed to erect. The lien laws of this country are exclusively created by statute.

The first attempt to create a mechanics' lien arose from a desire to establish and improve as speedily as possible the city of Washington as the permanent seat of government of the United States. At a meeting, September 8, 1791, of the commissioners appointed for this purpose, at which both Thomas Jefferson and James Madison were present, a memorial was adopted urging the general assembly of Maryland to pass an act securing to master builders a lien on the houses erected and land occupied, which was during the same year followed by the passage of a law as requested. The next statute on the subject was passed by the legislature of Pennsylvania in 1803. "These statutes," says a learned reviewer, "while they contained the germ of all subsequent legislation on the subject, are imperfect and meager in comparison to the state of the law at the present time." Mark that the original commissioners, and the statutes passed upon their recommendations, mention only the master builders, or, as we would perhaps express it now, the person employed directly by the owner. Gradually this provision has been enlarged so as to include claims for wages of mechanics and laborers employed upon the building, though hired by contractors or others selected by the owner. This has been advocated and adopted on the ground that the owner may properly be held responsible for wages due mechanics and laborers from persons selected and employed directly by him and whose antecedents and business standing could be investigated by him far better than by wage-earners.

While the legislatures of the various states were content to let the matter rest there, the lien laws were beneficial in their operation. But we live in a progressive country, or rather forty-two progressive countries now, and it is the business of each legislature to improve or attempt improvements upon the work of its predecessor and that of neighboring states. People argued that if it is proper to protect the builder and mechanic by a right for lien, why would it not be good also for the person furnishing materials ?—in fact all and everybody whose goods or labor enter into the construction of buildings ? And, because in the absence of positive experience on the subject, there were none to answer this query, amendments upon amendments were adopted from year to year, constantly extending the scope, ever bringing more classes under the so-called protection of the lien law, and making its provisions more technical and involved, until now thoughtful men everywhere are ready to acknowledge the lien law of today to be a delusion

and a snare, and it has become possible, under a feeling of absolute disgust with the operation of said laws, for builders to declare it preferable to do business without any lien law at all. Now we have the experience! Now we are ready to answer the query!

Indeed it is not well that protection by the right of lien should be extended to anybody beyond the mechanic and laborer employed at building and the person directly employed by the owner. And why? Because in the light of experience we now know that all parties in interest suffer and the true intent and object of the statute is defeated thereby

To illustrate: The parties in interest are the owner, the architect, the contractor, the sub-contractor and material man, the sub-sub-contractor if you please, the mechanic and laborer employed at the building, and the mechanic and laborer employed away from the building, in shop or quarry, in the preparation of material finally incorporated in the structure. For in some of the states all these different classes have sought and obtained enactments for their protection.

The owner suffers in being obliged to satisfy himself, and strictly, under the provisions of a super-technical law, that all claims have been discharged, he is made in effect the paymaster of his own contractor.

The architect suffers as the agent of the owner, but as there is now one grand national American Institute of Arcbitects we may safely leave it to voice the acuteness of his sufferings. Nor need we discuss here the uselessness of all lien laws to the wage-earners, but for ourselves we well may speak. The contractors suffer under the business annoyances prepared for him by the law, and which he cannot escape, no matter how careful or prompt in the management of his business—no matter how able financially to meet bis every obligation; and above all in creating and fostering unfair competition, because entered into by persons with all to gain and naught to lose.

The sub-contractor and the material-man suffers because he relies on the fancied security of the lien law instead of the character and business standing of his customer, the contractor, and from resulting financial losses. And so on through tbe entire list. Each is disposed to rely on some fancied (because ill understood) protection afforded by the lien law, instead of business sense and business principles, employed and found satisfactory in other branches of trade.

Loss to material-men and sub-contractors, under the operation of a lien law or without it, results from, firstly and principally, the stupidity, carelessness or ignorance of the contractor, or secondly, the corrupt collusion of contractor and owner to defraud, or thirdly, unforeseen accidents. But, whether this or that, it is always something the matter with the contractor—with the man who is the direct customer of the material-men or sub-contractors; the man who applied for credit, and who should not get it, law or no law, from a man who sells brick or lumber any quicker or on any other basis than he would be accommodated to the same amount by the man who sells dry goods or groceries.

If it had been the intention of our law makers, and the persons them thereunto moving, to wipe out contractors as a class, it is difficult to imagine any measure more effective than the successive enlargement of the scope of their ill-advised lien law. But certainly this was not their intention. The material-men particularly did not intend to destroy the financial ability and standing of their regular customers. And still this has been the result, and must be the result everywhere, because legitimate and logical.

With a clause in the lien law providing "that the aggregate of all liens shall not exceed the sums of the original contracts," the principal care of an unscrupulous owner is to accept the lowest obtainable bid, no matter how unreasonable or inadequate to the work to be performed. He need not care, for the sum of his contract is the measure of bis liability, and if loss results the law will kindly prorate the same among the deluded sub-contractors and material-men who put their faith in its protection. On the one hand, by unscrupulous owners, financially irresponsible persons are encouraged to estimate on and take work, because having nothing to lose tbey can afford to take chances and make figures with which the prudent, with accumulated savings, cannot compete, and on the other hand the same irresponsible persons are supplied by material-men and sub-contractors who rely on the security of a lien (as bas been that of the painstaking mechanic whom we formerly knew as a contractor, responsible for and promptly discharging his every obligation, has been superseded, in many instances, by a class of irresponsible speculators, frequently not trained in the trade or work they contract for, to the serious deterioration of the quality of work by them undertaken; who stay in a place while in luck, as the phrase goes, and skip when the turn comes. And so well is this understood that the execution of important and really good work is seldom intrusted to the contractor as we know bim to-day, but is done by days' work, or under the percentage plan.

As stated beretofore this is the legitimate outcome of the ill-advised extension of the protection of the lien laws beyond their proper province. The time has come to call a halt!

At our last convention it was

"*Resolved*, That this association request the governors, legislatures or authorities of each state, district and territory in the United States to take action to secure amendments to lien laws so that they shall cover the following classes of claims, *and none other*, namely:

"1. Claims for wages of workmen actually employed upon the property liable to attachment by the owner, and

"2. Claims for labor and materials furnished direct to owner either by contract or upon his order, and

"*Resolved*, That all filial bodies be recommended and urged to do their utmost to secure the above desired action."

To borrow an expression from the German this is and must remain a "pious wish." As far as at present advised no legislature has complied with the request, nor has any filial body "done its utmost to secure the above desired action." Why? Because the answer from material-men and the members of the legislature would have been, "No! All lien laws are class legislation, and it ill-behooves you as builders to urge the abrogation of rights of sub-contractors and others which you desire to retain for yourselves." No, gentlemen of the convention, the position is false and untenable! For your benefit as a class the first lien law was passed—it is meet that you should be the first to ask for its repeal. Boldly throw your banner to the breeze and let the world know that we as builders want "No lien laws at all!" Let all unite in urging tbeir erasure from the statute books. This cannot be accomplished in a day, or a year, or ten perhaps, but there are many among us today young enough to see the realization of this reform, and to profit by its fruits.

When no longer hampered by lien laws the building contractor will become a business man, and his occupation a legitimate calling; irresponsible competition will cease; ample capital invested in and legitimate profits will result; then reputation and character will count in this as in other callings; the fancied security of the sub-contractor and material-man of today will have given way to the real and substantial security of dealing with responsible and competent builders; none others will survive. "But," I think I hear some one say, "how will it be possible to do business without a lien law? Why, had it not been for the lien law, I would have lost large sums of money on several times in the course of my business." Yes, my dear sir, you would not. Knowing that you had to rely on yourself alone you would have demanded security ere you had given large sums of your money into the possession of others, and they would have furnished it. That is all! The builder needs the lien law no more than the banker does! Nor let it be urged that without a lien law it will be impossible for a painstaking and competent mechanic to go into business for himself unless he has money. No, gentlemen, it is not so. The competent and deserving do not remain on tbe bottom round in other callings. To the sure-footed and fleet belongs the race. Money is but the expression of confidence in a man's ability, bonesty, sobriety, in short, success. Let him show himself worthy of that confidence and he will have credit, and that is but another name for money. It is true he may not rise so rocket-like, his progess may be slower, but certainly he will not come down so often like a stick, his growth and progress will be solid and substantial because deserved and earned. It will require sometbing besides gall and cheek to start business, but when established it will represent something, and character and reputation will find their reward.

Gentlemen of the convention, let us all join hands in this effort at reform! When united we cannot fail! We must free our profession—the calling we are all so proud of—from the incubus resting thereon! Raise it out of the slough into which it has been gradually disappearing, and place it on a solid, firm foundation! Paternal protection may have been required in the days of Jefferson. Now it is a detriment! We have been kept in leading strings long enough! The time has come to assert our manhood! Down with all lien laws!

Respectfully submitted, GEORGE C. PRUSSING.

Mr. President and gentlemen: With your consent I will now introduce the following:

*Resolved*, That it is the sense of the building contractors and material-men in national convention assembled, that the best interests of the entire body politic demand the repeal of the various lien laws heretofore enacted, and

*Resolved*, That we, being the class for whose protection they were first introduced, recognize their operation as injurious to our business and wrong in principle, and pledge our efforts to the total repeal of said laws as far as they relate to our calling, and

*Resolved*, That all filial bodies be recommended and urged to do their utmost to secure the above desired action.

The President: It was expected, I think, that Mr. Richard Deeves, of New York, would reply to the able paper to which we have just listened, but the hour has arrived at which, by the order passed by you yesterday, it is necessary to commence the discussion of the resolution offered by the Committee on Builders' Surety Company. So that, unless we have unanimous consent of this body, we cannot go on with the discussion of the lien law at this time.

Mr. Madden, of Chicago: Mr. President, I move you that the consent of this body be granted to Mr. Deeves to read his paper, after which we take up the question of the Surety Company.

Mr. Madden's motion was seconded and carried.

Richard Deeves, of New York: Gentlemen, I feel in answering to this able paper read by my friend, Mr. Prussing, of Chicago, that I have got no easy task. He has presented his side of the case in a very able and thorough manner. I feel that I have got to deal with the Demosthenes of this convention on this subject, and I feel I have got a weighty job on hand to convince you to the contrary. But I feel that when a person has right on his side "one can chase a thousand, and two put ten thousand to flight." (Applause.)

### RICHARD DEEVES' ADDRESS ON LIEN LAW (NEGATIVE).

While at the last convention held in Philadelphia I was greatly surprised to find there was too much antipathy to lien laws. I had not before heard or known of any opposition to such laws, especially from mechanics. I have heard different suggestions that the mechanics and tradesmen who furnish materials shall be preferred to a mortgage or other incumbrance filed prior to a lien. I especially noticed this opposition as coming from the members of the convention hailing from the West, and I could not then account for their opposition.

It has always seemed to me that prudent business people would never recommend anything that would deprive them of a remedy, or throw away any opportunity of collecting their honest claim. It would not look business-like to me for a tradesman to do so. But as I came from the East, where we have got to be somewhat old fogyish, I concluded that the great West, where cities are built in a day and where they are so progressive and do everything which they undertake on such a grand scale, even to blizzards, I concluded that among other great discoveries which they had made was a new and better method to collect bad debts, and the East would very much like to know how they do it. But I failed to get the information I sought, and it is only within a few weeks that I discovered one of the causes of this opposition. A book was handed me in the exchange in New York entitled "Hand Book of the Builders' and Traders' Exchange of Chicago," and glancing through its pages I came across a synopsis of the lien law of the State of Illinois, and after carefully studying it the mystery of the opposition was explained. I no longer wondered why tradesmen should want so-called lien laws abolished, for if the lien laws of most of our states are like the law of Illinois the mechanics and tradesmen have no protection under them. They are a delusion and a snare to every mechanic and tradesman who places faith in them. The proper title for such a law would be: "How mechanics and tradesmen can be defrauded by their own lien laws."

Under this law of Illinois if a contractor fails to make a sworn statement, when he seeks a payment from the owner, giving "the name of every sub-contractor, mechanic and workman in his employ, or person furnishing materials, and the rate of wages or the terms of contract, and the amount due and to become due to them or any of them, and unless such sworn statement is given as required, the contractor has no right of action or a lien against the property." The owner may at any time during the progress of the work demand, in writing, of the contractor the statement above described, and if the contractor fails to furnish such statement within five days after demand is made he forfeits to the owner for every such offense the sum of fifty dollars, recoverable in an action of debt. And in addition to the foregoing, as if to make it more humiliating to the contractor, the law recites, "and thereupon the owner, lessee, or his agent, shall retain out of the money due or to become due the contractor an amount sufficient to pay all demands shown to be due by the contractor's statement, and shall pay the same to the persons entitled."

The law further states that "a payment of money made by the owner or his agent, before such statement is made by the contractor, is illegal, and does not affect the right of such sub-contractors, mechanics and workmen to a lien."

Let us look into such a law. In the first place, in order that he may have a right to a lien, the law states in so many words, whenever he wants a payment he must give the owner a sworn statement of his pay-roll, and the rate of wages he pays, and the amount and nature of the bills owing thus; and if any are not paid the law makes it obligatory on the owner to deduct the amount, or failing to do so, if the contractor did not, the owner would have to pay the second time. If I were doing business under such a law as that I would consider it my duty to do all I could to have it abolished. *Under such a law the contractor becomes a serf.* Should he attempt to recover on a lien the lawyer for the owner would very quickly find some technicality by which he would beat the plaintiff—through a clerical error in the spelling of a name, or a mistake in the amount of wages paid, or through some other legal quibble would find himself worsted in the fight, and in addition to the loss of his money and paying his lawyers would be saddled with costs. I venture to assert that a contractor today in the State of Illinois could not collect a claim under this lien law if duly contested by the defendant. It would be far better to lay the lien law aside and bring suit under the common law if the owner were worth anything, and, if not, for the sake of his pocket and peace of mind it would be better to charge it to experience account as a loss.

As if to throw further obstacles in the way and to make sure there would be nothing left for either contractor or workmen, all parties filing liens without any order of priority share pro-rata in the amount due, thus making a scramble between the lawyers for the boodle and a Kilkenny cat fight between the lienors, with nothing left—not even the tail—and thus depriving the diligent creditor of any benefits from his diligence through priority of claim. He would be in as bad a condition as a friend of mine, a carpenter in New York, who some years ago did the carpenter work of a house in the Bowery, and on the completion the owner tried to beat him out of over four thousand dollars, and finding he could not get a settlement he placed a lien upon the property, and after awhile his lawyers commenced foreclosure proceedings, and the owner fought it for several years. In the meantime my friend paid out, as the case went on, various sums for stenographer's fees, court fees, and at short intervals his lawyers had to have a payment on account, and his bills for cigars, soda water and ice cream were no small amount; but, like all things on this mundane sphere, after four years' litigation my friend won his case and got judgment, and his lawyers collected the amount due with over four years' interest at six per cent. He had already paid out, as I have stated, in various ways more than two thousand dollars; and when he went up to his lawyer's office to get a settlement, on being admitted to the inner sanctum, one of the lawyers talked to him like this: "Well, we won our case. Hard fight for it; hard fight. Had a bad case. Were it not for the points we raised and the amount of work we did, you would have been beaten and would have had to pay all the costs," etc. My friend than began to get scared that their expenses would bring a debt over and above what he had already paid out and they had collected, so after some further conversation and some intimations he concluded that if he could get a receipt in full, without paying any more money, he would be exceedingly fortunate. After some talk about the weather, etc., my

friend asked the lawyer to give him a receipt in full and call it square, and in addition he took my friend to the nearest whisky shop and they had whisky together. He thus lost his time and over six thousand dollars. He thinks today he got off cheap. I do not wish to be understood as reflecting on lawyers generally, as I have had a more pleasant experience.

A proper lien law is a very necessary thing to protect honest contractors and their subs and workmen, but it must be simple and equitable. In the language of W. A. J. Campbell, of New York, who could not come through sickness, and in maritime law, the procedure of libel, which is, it is said, the equivalent of a lien law on land, dates back to the Phocnicians, and is handed down to the present time by various nations. The law goes further than our lien law. The mechanic or sailor, for his wages, can libel a vessel in any port, and that claim holds good against her under any flag, and until discharged by some court of jurisdiction.

Why should we not have lien laws? Is there anything wrong in a person trying to collect what honestly belongs to him? Is it not his duty to his creditors, to his family and himself to collect if he can the money due him? I know that the courts hold that a man may lie and do other things which in themselves are wrong in order to obtain that which is his own.

What is there wrong in a fair and equitable lien law?

In an active business experience of over twenty-one years I have never known an honest owner injured by our lien laws. Nor do I ever hear honest owners complain of a lien law. A lien law should not be made so as to give greater advantage to one class of men than the other, unless it be the workingman. Even in this respect our legislators are given to go to extremes in order to pose as the workingman's friend, and are continually tinkering with the law, and making it harder to collect the claim under it. The more simple the law, the easier to collect the claim.

We have now in the State of New York, we think, one of the most simple and equitable lien laws which has ever been enacted,—a law under which any person who has an honest claim, whether as architect, builder, material dealer, mill owner, mechanic or laborer, can collect his money; yet I find it has been amended, and in my estimation weakened since its enactment in 1885. I understand there is a movement now on foot to further amend it, ostensibly in the interest of the workingmen. I cannot see how they can improve it in this respect unless they amend it so as to take precedence of a mortgage already filed, and in that case it would conflict with the common law. The courts would decide against it. Invested rights must be made secure, else there will be no confidence and enterprise.

Some persons may say: "Why should the contractor or the men furnishing materials and labor be protected more than any other class? Why should they not carefully inquire into the standing of the parties, the same as the merchant, before making a contract or the doing of any work?

The case of the contractor is very different from the merchant's who sells a bill of goods to a customer on credit. The merchant has his choice to keep his goods and wait for a cash customer or give credit and take his chances. But the contractor has no such option. He has to place a certain amount of labor and material in the shape of improvements on premises belonging to the owner, which when placed there and incorporated cannot be removed by him without the consent of such owner. The owner then can sell or mortgage and wipe out all equity the contractor had in the improvements.

Without the employment of a lawyer at considerable expense, the contractor cannot tell how much equity the owner may have in the property he desires the contractor to labor or, and the chattel mortgage I have found there was no incumbrance against it on record at the time, yet there might be an unrecorded mortgage or judgment in existence which when placed on file and attached or foreclosed would wipe out the contractor's or mechanic's equity in the improvements. The owner will have skipped, as I have known a case, or is nominally insolvent, as I have known a number of cases, but yet they managed to save enough from the rent to live well afterward, and will probably take a trip to Europe for the health and enjoyment of themselves and families on the salvage. The contractor has no redress unless there be a good lien law, and he takes time by the forelock and takes advantage of it.

The banker has a decided advantage over the contractor or the trader who furnishes the materials or the laborer who performs service, in the fact that he gets in his lien on the property before he advances the money. The contractor cannot expect this.

The livery-stable keeper has a lien on your horse for his unpaid board or the keep of your carriage. The hotel at which our delegates are stopping can lien our grip if we attempt to skip without paying our board bill, and if they could prove that we are repeaters in this line the law would lay its grip on us.

In my own personal experience the lien law of the State of New York has directly saved me over $50,000, and indirectly many thousand more. Where there is a good lien law, such as we have in New York, it is very seldom that the plaintiff has to carry the case, if he have an equitable claim, to a final decree in the courts. The case is generally settled before it reaches that point. And this is one of its greatest virtues. Of the amount I have saved through a lien law I had to foreclose in but one case only, and I effected a satisfactory settlement in this case before final adjudication.

The greatest benefit of a lien law comes from the fact of its being a cloud on the title, which when placed there is like the libel on the ship, it sticks to the property no matter who the owner is until discharged by payment or order of court. I also know that were it not for the fact of having a lien law, contractors and others engaged in furnishing materials and labor would be cheated very often out of their money. If we had to go into a court and waste our time in a suit, and be subjected to all the annoyances of a law's delay and uncertainty, and the chances of being beaten through some technicality, or the perversity of some juror, we would let a great many dollars be taken from us rather than undertake the suit; but with the possibility of a cloud being placed on his title the owner will pay before having his property liened. One case in point as to the powerful leverage of a lien.

I think it was the late Commodore Vanderbilt who said it is easier to make money than to retain it when made. For every dollar we make there are numerous persons doing their utmost to get it away from us. The hard-fisted honest contractor, material furnisher or toiler is good game for the gentleman who lives by his wits to pluck.

Why should we throw away any of our safeguards? Is the boatman so reckless as to throw away his oar? On the contrary, we should strengthen them where weak and hold on to the oar. Because some other trader in his business has no protection against beats and swindlers is not a good logic why we should not. *I believe in protecting every honest man as far as we justly can against all species of dishonesty.*

If any of our lien laws are defective, weak or deceptive, have them amended. Look into the laws of the various states and adopt what is good in them, but reject the bad, and when you have a good law stop this eternal tinkering which nullifies the good of most of them.

We can learn a great deal in this respect from the British parliament. All bills to be offered have to be submitted to parliament lawyers, appointed for that purpose, three months before parliament meets, and they scrutinize the bills and see whether such bills conflict with some other or with the principles of common law; if it does it will be thrown out, and if not it will be reserved. This saves the nation a great deal of vicious legislation.

Have your lien laws simple and easily understood by the laymen as well as the lawyers. Make it beneficial to the honest owner as well as the contractor, trader or toiler, and when you have such a law the collection of your honest claim will be made easy.

When you have a good law watch it. Because A may have a bad law is not a good reason why B, who has a good law, should abolish his. Rather have A reconstruct his bad law so that he can have the protection to which every honest man is entitled.

Now, gentlemen, I think I have presented my case. I think I have justice on my side, though not the eloquence of my friend, and I would offer this resolution: That all good lien laws be let alone and the bad ones improved. (Tremendous applause.)

Mr. Prussing, of Chicago: Mr. President, I rise to second the motion of my friend. (Renewed applause.) If it is possible with a fine-tooth comb to find a good lien law in the United States, for God's sake preserve it. (Laughter and applause.) Those are my sentiments, and I adopt the argument made by my friend, in toto, as supporting my side of the question. I second the motion.

The President: The innocence of Chicago is simply refreshing. (Laughter.) The gentlemen will please understand and remember that by general consent the two papers upon the lien law were to be read, although overslaughing the time which belonged to the Builders' Surety. Therefore, the discussion of the resolution offered by the Committee on Builders' Surety is before you in the regular order. As the chair understands the matter and remembers it, we yesterday accepted and approved that report of the Committee on Builders' Surety, but did not take action upon the resolution thereto appended. It is now properly before you. A motion to adopt will be in order.

An hour and a half was here taken up with the discussion of the resolution, and the entire plan of the company, so far as promulgated, was reviewed by Messrs. Madden, Murray (who entered a substitute for the resolution, which was discussed and laid on the table), Harris, Blair, Deeves, Moulding, Sayward, King and McAllister, after which the resolution as presented by the committee was put to vote and carried.

The Secretary: The following telegram has just been received, dated at Wilmington, Delaware:

To the Secretary of the National Association: Wilmington Exchange, in annual session, sends greeting to the National Association.

The President: Gentlemen, it has been suggested, for the convenience of certain delegates who are very much interested in one special question to come up, that we pass the subject of lien law, if there be no objection, and now take up the second question to be considered this afternoon according to the programme, which is "Sub-contracting: Shall the National Association recommend that it be encouraged?" Mr. Sullivan, of Chicago, wishes to speak on that subject. (Applause.)

## SUB-CONTRACTING—SHALL THE NATIONAL ASSOCIATION RECOMMEND THAT IT BE ENCOURAGED.

No question can probably be propounded which possesses a more comprehensive and far reaching interest, not alone to builders, but also to the general public, meaning thereby the projectors of building enterprises of every description, than this question which I shall endeavor to elucidate.

It is almost unnecessary to say that, in consequence of the great development of building within the past decade, or for a longer period, this problem of the just and equitable distribution of the responsibilities, the emoluments, and the honorable recognition by the public of every master workman, every guiding hand and directing mind engaged in the construction and embellishment of a building, has called forth much diversity of opinion, and no small amount of discontent on the part of those to whom this question comes directly home, namely, the sub-contractors, that large and by far most numerous class of mechanics or craftsmen—call them by what name you will—whose life-long training must of necessity be intense, peculiar and all-absorbing, and upon whose efforts, in the very nature of things, the success of every building project, great or small, hinges and depends, and it is on behalf of this class of sub-contractors that I essay a few words of argument, or rather of explanation, with respect to rights which are sometimes unjustly invaded, often thoughtlessly overlooked, and, when so slighted, always to the injury of the purchasing public.

The practice of awarding extensive building contracts, embodying many and peculiar branches of mechanical or decorative industry, to an individual or a firm assuming the functions of a general contractor, in other words, the general contract system, as opposed to the separate or independent contract system, which gives to the one, business man or mechanic as he may be, the financial control—and any further control is mere pretense—of the many specially trained and expert sub-contractors, while it may command the approbation of the few, appeals, in my humble judgment, mainly to one dominant feeling—avarice; the feeling which prompts the one to absorb the profits of the many, oblivious of, or indifferent to consequences respecting the just aims and aspirations which must ever guide and control the capable and accomplished artizan, and, deprived of which aims and incentives, he cannot arrive at the goal of acknowledged excellence, the master's rank, to which constructive and decorative effort must ever be directed, or fail of the highest achievement.

The specific questions implied in the preceding remarks seem to me plain and answerable only on the part of the sub-contractor. I shall state them briefly:

We expect of the master mechanic, the sub-contractor, that he shall be a practical workman, shall have worked at and learned his trade, and that in his line of mechanical industry he shall be esteemed an expert, a recognized master. Can such a man pursue his calling and obtain such recognition without a just pride in his work, and an equally just hope of ample regard for the mastery and skill he has acquired? Assuredly he cannot, else he would be more or less than human. Acquirements, competence, distinction, honor, these are and should be his impelling motives. Can these motives be subserved, his honest ambition gratified, his incentives to greater effort stimulated if he finds that his efforts, his distinctive personal aims, or personal consequence, are apt to be merged in those of another, or, as I have before intimated, entirely overlooked, and, not infrequently, his just profits partly or wholly absorbed by the spirit of greed which, under the guise of convenience or facility, prompts the system of general contracting?

Here it may be urged that I assume too much, as bearing against the sub-contractor; that I am, so to speak, begging this question of his just and honorable recognition which I claim as the grand motive that should animate every true artizan. I do not think the experience of the large majority of those to whom I address myself who have figured in the role of sub-contractors could be quoted adversely to my position, and it is a question only to be tested and settled by such experience.

How often have we received the attentive consideration, even of the owners, during the progress of their building, where the general contract system obtains? Do we not know that such cases are merely incidental, and that even then they are as frequently of a discouraging as of a cheering character?

Referring now to the pleas of convenience, facility, the capitalizing of building projects, and other kindred pretexts; the ostensible ones which might be and are urged in favor of building on the general contract system. Granting that at times these may be fairly advanced, are they not frequently over-estimated? To whom do these considerations become of most consequence? To the owner? Perhaps so, when financial management, credit, or some such underlying motive must influence him, but not alway even then, and with a counterpoise in that lack of closer business relation, appreciation and confident esteem which, on every true principle of economy, should prevail between the owner, who is the actual buyer, and the artizan, the master mechanic, who is the actual producer, the actual seller.

Again, does the convenience or the facility of the general system come home to the architect? I answer, it would hardly be an argument in its favor if it did, because the architect's first and paramount care should be excellence of work, and my proud experience with members of that honorable profession is that excellence is the dominant idea, but, the fact is—and close examination will bear out the statement—that the general contract system relieves the careful and conscientious architect not at all, and too often, in the adjustment of differences between the general and sub-contractor, occupies many of his overtaxed hours.

Let me here state that many, *very* many times I have been brought into relation with principal contractors under the general system, and such experience satisfies me that there are and will always be found such men, of high character and personal skill; yet, here comes in another and I may say my final consideration, which is: That no matter what the character or experience of the general

contractor; no matter what special training he may possess, let us not lose sight of the vital question, namely, the vast strides made in the art of building in this country, even within the past few years; the almost total revolution in the application of building materials and decorative inventions; the advance in masonry, stone, wood, and iron and steel construction, and the complex nature of the many items or sanitary work, convenience or adornment which go to complete the modern American edifice, and who will deny that these results, astounding in their magnitude and variety, and to the inventive genius displayed, are the fruitful outcome of the labor of the tireless mechanic, the artizan, the inventor, the master of his craft; surely not of the general contractor.

I say then, with all confidence in your judgment, let us not approve any system of contracting which, however remotely, could tend to relegate that individual merit, that heretofore triumphant energy of the artizan to obscurity. Let us not divert one ray of light, in all the turmoil of our daily lives, from the individual form of the master mechanic.

Rather let us say, with that giant in intellect, that noble friend, teacher and toiler for art and the artisan, John Ruskin: "*In all buying consider, first, what condition of existence you cause in the producers of what you buy; secondly, whether the sum you have paid is just to the producer; thirdly, to how much clear use for food, knowledge, or joy, this that you have bought can be put; and fourthly, to whom and in what way it can be most speedily and serviceably distributed; in all dealings, whatsoever, insisting on entire openness and stern fulfillment; and in all doings, in perfection and loveliness of accomplishment.*"

No great nation without great artizans, great producers, great toilers! To them, as in this splendid passage, will the thoughts of great men ever be directed, and it is for them too, the master mechanics, the artizans, the toilers in this greatest of all human industries, to whose fertile brains and busy hands this great land already owes so much, that I would present my humble plea.

Mr. Sullivan: Mr. President and gentlemen, I will offer the following resolution, which I will read, in order to bring this matter up for discussion:

WHEREAS, The custom at present prevails, to a great extent, of awarding several items of building work to one contractor or firm, under which has become to be known as the "General Contract System"; and

WHEREAS, This general contract system seems to be on the increase and to be the occasion of much discontent among the numerous classes of mechanics who thus reluctantly find themselves compelled to occupy under such a system the position of sub-contractors; therefore, be it

*Resolved*, That it is the sense of the National Association of Builders, in convention assembled, that the system of sub-contracting should not be encouraged; that the said system is, on the whole, unjust to the master mechanic; that it is detrimental to the progress of mechanical skill and knowledge, inasmuch as its tendency is to obscure, if not altogether ignore, the trained and capable artizan, who is often debarred, by the very nature of his calling, from entering into competition as a general contractor, thereby decreasing the sense of individual consequence and responsibility which should attach to every man who aims at the direction and control of any branch of the building business, and without which incentives the results which attend continuous and ambitious efforts in his special department cannot be expected.

That the said general contract system also tends, in a marked degree, to do away with the just and reasonable profits of the sub-contractor; and, therefore, that under proper limitations we consider the time has come for stringent and well-defined regulations which shall check this growing evil and place the master mechanic on a fair footing as an independent contractor.

Mr. Blair, of Cincinnati: Mr. Chairman, I second that motion.

A. McAllister, of Cleveland: I was assigned to the business of debating Mr. Sullivan's paper. As a general contractor, as a matter of fact there is very little, if anything, in his paper to which I cannot heartily subscribe. I think he makes a mistake in supposing that the sub-contractor disappears or is overshadowed in doing his work for a general contractor rather than for the owner. I think that is not the fact. Where the general contractor is responsible and honorable I see no damage or harm that can befall the sub-contractor. But there is one matter in the resolution to which I wish to allude, in which he asks or seems to ask that this convention shall ask of owners that they shall divide the contracts; that they shall contract directly with the man who has learned the trade and produces the work. I think it would be very difficult, in practice, to make anything of that kind of work. Take the carpenter—there are probably not five per cent of the contracting carpenters in the United States who possess the machinery and appliances with which to produce the shopwork. Of course he can buy that from the millmen. If he does, he sub-contracts. That is true also of the lumber; he sub-contracts with the lumber dealer for the lumber, whether it is merely delivered at the building ready to work, or whether it is delivered set in place, completed; the transaction is precisely the same, and sub-contracts result, divide it as you will. In the same way with the brick mason. If he is not a brick manufacturer he sub-contracts for his brick.

A Delegate: For his lime, too.

Mr. McAllister: Yes, lime and cement. The water, I believe, is not in the province of any special person. The stonecutter and stonelayer in the same manner sub-contracts for his material. The plumber sub-contracts for his pipes and his fixtures. The slater and the tinner sub-contracts for his material. The painter and the decorator sub-contracts for his white lead and oil and his glass. Hence, it seems to me that if this convention adopts this resolution it assumes a position that is not practicable, and therefore, I think, it would be wrong to adopt the resolution. With the major part of the gentleman's statements I am in hearty sympathy.

Mr. Murray, of Chicago: Mr. President, I heartily indorse the resolutions of my friend Mr. Sullivan, so well presented. There is no question that in the Western states, where the direct contracting system by the trades individually themselves has been the rule, the whole building fraternity is on a better financial basis than in those states where the contracts are let as a whole. We know that in our own city, in Chicago, all the building contracts are let individually; the stonecutter, the mason, the carpenter, the plumber, and every other mechanic has a direct contract with the owner; and consequently, being a direct contractor, he earns more money and stands upon a better financial basis than almost in any other western city where the contracting, as a whole, is in vogue. You, gentlemen, in the different cities here represented, especially in the West, will know yourselves the importance of this resolution, and will agree that, as in the language of our friend Sullivan, sub-contracting should not be encouraged

Stacy Reeves, of Philadelphia: Mr. President, I want to ask whom are we going to substitute for the general contractor? The architect (that is what will have to be the answer) or the owner? Is it not a fact, patent to us all, that it has cost us a good deal of labor to rather curtail than add to the privileges that the architect has heretofore exercised over the mechanic? It has been our aim rather to curtail than add to their opportunities to tyrannize over the mechanic. And when you put him as general contractor, why he will tyrannize over each individual and he will be twice the man in importance he is today, and I cannot understand why sub-contractors or gentlemen in other lines should object any more to working under respectable general contractors than they would under a respectable owner or architect. I cannot understand why it is. I want to say to you, while I am a general contractor, that no man, no general contractor, is any better than his sub-contractor has helped to make him. He cannot have good results unless he has good sub-contractors with him. And, so far as I know, they get due credit for the manner in which they execute their work. We are simply increasing the power and influence of the architect, whom we are not able, now, to cope with. It has been one of our labors to get from him many things that we think he has heretofore withheld. Now, do not add to his power, because there is no man to take the general contractor's place unless it is the architect. The owner has not the time or ability, or something or other. And where, then, are you going to stop? Where are you going to stop? The lime man, the lumber man has an equal right to say, "I will not get due credit unless I come immediately in contact with the owner. I do not want to sell this man my lumber, I want to sell to the owner, so I can get due credit for my work." The lime man, and the stone man, and the sand man, might say the same. Where are you going to stop? There will be an army of men, with the architect representing the owner, left to deal with, instead of one individual man. I think it will be a hard business.

Mr. Eidlitz, of New York: Mr. President, I do not understand this, by any means, but I do want to say this. I believe I am now about forty years in business in the city of New York. I can remember the time when the mason was what they used to call a bigbug, because he got in building a house about $350 worth of stonecutting and about $150 worth of iron work, etc., all connected with his contract. Now these things have all changed and are naturally by themselves. In the work as it is now, for instance where the ironwork is about as much as the mason's work, the architect and the owner know enough to go direct to the ironworker or the stonecutter and give him the contract. But there is one thing—the mason, no matter whether he has all the sub-contracts under himself or not, is always around the building. He has already a representative on the building, and somehow or other they will always come for some advice or other, either to himself or to his foreman. Now, then, I do not believe that there is anything really in this matter, for the reason that whenever a sub-contractor finds that he does not desire to work for the contractors, he can naturally go and get the work himself; and it has come to be so in New York now, that the iron work and most of the stonecutting is given out to different parties, which in former years was given to the mason. Yet, I have no objection, if the ironworker was not willing to do $100 worth of work for me or any other responsible contractor. I believe, as Mr. Harris says, that sometimes the sub-contractors go away from the job and have probably each one, or all together, a great deal more money left than the original contractor. And many a time, gentlemen, I have—and I know others have—paid bonuses to mechanics, sub-contractors, more than they had estimated upon their own work—than they had allowed for the work. (Applause.)

Mr. Prussing, of Chicago: Mr. President, I now move that the resolution introduced by Mr. Sullivan be referred to the Committee on Resolutions for their report tomorrow.

The motion was seconded and carried.

The President: Shall we go on with the discussion of the lien law? It is the next in order.

Mr. Harris, of Philadelphia: I think we can settle it in a very few moments.

It was moved and seconded that the convention proceed to finish the discussion of the lien law, and was so ordered.

Mr. Harris, of Philadelphia: Mr. President, I am sorry that I have to get up so often this afternoon when there are so many who wish to speak, but I have a raw spot. When you speak about the lien law, it touches me up. I wish to give the gentlemen some experiences of Pennsylvania (a small state in the East) where the lien law was practically abrogated for about five years, and I want to give you the results there of having no lien law and having a lien law which it was impossible to enforce by some means or other. It was in this way. Some of our unscrupulous rich men there discovered that they could put a mortgage on a piece of ground that would cover the cost of the entire building when it was built. Now you see the point. The consequence was that, in two or three years, they raised up a system (the general contractors may take this in) they raised up in the course of two or three years a lot of irresponsible men who, in collusion with owners, pretty nearly wiped out and caused a panic in my good old city of Philadelphia. In this way an owner of ground that wanted to build fifty houses, worth $3,000 each, which would be $150,000 (we only build little houses there), would take up a piece of ground worth $50,000 and he would create an obligation on it worth $200,000. That was the entire value when it was all built up. That mortgage took precedence of any lien, because it was created before the building was put on it. Now, that's all right. He goes to some shoemaker, who is working on the bench at sixteen or eighteen dollars a week, and he says, "Here, I have got a speculation I want you to go in with; I am going to get bids for to build a lot of houses, and after I have got those bids I want you to come and see me." He gets bids. Now, I am speaking of actual facts, no buncombe. He gets bids from a lot of reputable builders. They tell him the lowest amount they can be built for, $150,000. That's very good. His shoemaker friend,

where he gets his shoes mended, comes around tonight and says, "I want you to give me $150,000 for building." They start to work. The contractor says, "I want to see a lot of scalawags around town who expect to get it, somehow or other." No matter what they do, the point is this, he had no object in cutting the sub-contractors down to a small profit; he would go to a lot of contractors and say, "I have got a big thing: I have got into an enterprise with a rich man and I want to get some sub-contractors, carpenters, plasterers, bricklayers, and all that. Put in a pretty good sized bid. I have got the thing all fast." Well, it *was* a snap—at the *start*. (Laughter). They put in a large bid and the job was awarded to them. They get along; and they build up about half of the houses. In the meantime the man tells them he has not much capital, but after he gets to a certain point, if he can get the second floor joists on, he is going to make a big drawing, and they will all get their money. Up they go. The first payment he gets probably $10,000, which he divides around—and it takes about a month to do that (laughter)—and he gets $2,000 in his own pocket and he looks down and says, "How did I get so much money?" He goes on until he gets the roof on—which is the second payment. Now this was brought out in the legislature of Pennsylvania, for the purpose of abrogating this mortgage clause. The first payment that man got, he had a wife and five children at home; on the second payment he got, he had in addition, a carriage in another room. (Great laughter). I hope you haven't been there! The second payment he gets, he calls the people around him (and he gets a pretty good payment) and the contractor pays them *so much money* that the next week he is in Europe. (Renewed laughter).

A Delegate: Is this the general contractor or the sub-contractor?

Mr. Harris: This is the actual fact, brought out under oath, in the legislature of Pennsylvania, which we have record of. The next week he is in Europe, and the men commence to file their liens. Well, they file them, and they are on file yet, a good many of them. Some of them are dead. For that reason I am opposed to any abrogation of the lien law. (Applause.) In our state, the lien only covers the general contractor and the first sub-contractor. The law says it is impossible to trace lower than that. I do not think the lien law has affected anybody in our state to their injury. Good people pay, and bad people are made to pay. That is a punishment which they are entitled to. And that, I think, is what we want. Now this lien law of Chicago I undertook to wade through one night—if I wasn't crazy the next morning! I hadn't drank anything, I know. (Laughter.) I gave it up. But I think it would be wise if a committee was appointed from this association to collate the different lien laws of the various states, pick out the best and submit it to the different legislatures and get it passed. I want you to understand, gentlemen, that the body that is represented here has an immense political power, if it is used to the good of their interests and the interests of their constituents. There is no question about that. I mean that any man has a right, in this country, to use the power that politics give him to urge a good measure and see that it is carried out, and I think if some of us would turn our attention to that, and not have so many lawyers and merchants making laws for us, it would be a great deal better for us. (Applause.)

Mr. Purington, of Chicago: Mr. Harris tells us what can be done with the legislatures, and he suggests that a committee be appointed from this association to collate the different lien laws, boil them down, digest them, pick out the best of all of them and then have them adopted by the different legislatures of the different states which we represent here. Is that right?

Mr. Harris: That's right.

Mr. Purington: Now, suppose we did that, and we got the law that just suited us—a law as good as that which our friend, Mr. Deeves, from New York, says they have there, and inside of five years we should be just where New York will be inside of five years, and where they have already begun to come, according to Mr. Deeves' own statement; amendments upon amendments will be tacked on to those laws, until they become equal to the law in Illinois.

Mr. Harris: Then we'll collate again.

Mr. Purington: Besides that, if a committee of forty or fifty men (of which committee Mr. Deeves was chairman, as I understand) went to the legislature at Albany and labored for three or four months, more or less, getting all the laws of the State of New York abrogated, and this new law adopted, if that forty or fifty men could do that, is it not probable that seventy-five or eighty men of equal influence with any one of those—each one of them of equal influence of the forty or fifty, will, whenever that law comes to the pinch, have pitched their tent in front of the state house at Albany and live there until they get that law repealed and a law passed which suits *them?* It is precisely this state of things that has brought us, in the State of Illinois, to the deplorable condition in which we are now. Amendments, repeals, enactments upon enactments have been made, until our law, as stated by Mr. Prussing, is simply *food for lawyers*. The lawyers themselves don't understand it, and they get their fees out of laws which neither they nor anybody else understand. (Laughter.) There is no question about the hardships of our law in Illinois, and it is from that standpoint that Mr. Prussing and myself and others feel as he does and as they do upon this question. There is no question but what we have got our information from our observation. We are looking upon the black side of the sheet while our friend in New York is looking at the white. There is a time, not far distant, when he, as we now are, will be looking on the black side of it. Now, with this business of continual turmoil and continual trouble in keeping a law upon the statute books that shall be of any use whatever to us, is it not better that we rely upon the same security that all other sensible business men rely upon—money, credit, reputation?

Mr. Adams, of Indianapolis: Mr. President, I have a disinclination to say anything on this matter and I will add but a word. My friend, Mr. Purington, who is a very clear headed man, and always gives a reason for the faith that is within him, is engaged in the same business in which I am engaged. We are manufacturers of brick; but the conclusion to which he has arrived, from his reasoning, and from his logic, and from his deductions, I cannot indorse. I do not believe, Mr. Chairman, at least I do not wish to believe, that there is any very considerable proportion of this convention who would throw down the bars, and who would take away a man's protection and the means whereby we may get our money, a means of safety and safeguard, from those who are engaged in the different branches of the building business. * * *

Mr. Byrnes, of Buffalo: Mr. President, and gentlemen, this question has been discussed several times before our exchange. We have men, no doubt, that carry on as large a business as some of those that advocate doing away with the lien law. But the fact is that from time to time they have had to take advantage of it. So far as our exchanges are concerned, we are perfectly satisfied with the lien law of the State of New York and I do not think we can better it. The course which this question has taken would almost give people to believe that it was dishonest contractors that were upholding lien laws; you would think it was the honest ones that wanted to do away with them. Now, I think we have just as honest ones in the State of New York as we have in any portion of the country and I think it is a bad impression to throw out to the public. We are satisfied with our lien law. If other people are not satisfied with theirs, let them do away with it. That is all I have to say.

Mr. Blair, of Cincinnati: Mr. President, what I desire to say will be brief, on account of the lateness of the hour. I wish to say that the Cincinnati Exchange did not instruct us as delegates to vote upon this question, but they did by resolution affirm, about two weeks before our departure from Cincinnati, that it was the sense of the exchange that our lien laws in Ohio be maintained; that they were unanimously in favor of the lien law as it stood upon the statute books of Ohio. As I said in the start, we will use no arguments in favor; it is the feeling of our exchange and we so express it to you gentlemen, who represent your different exchanges, and we feel as though Cincinnati ought to be respected and the exchange that we represent. In your vote on this question you ought to think a moment of the feeling of the Cincinnati builders.

C. D. Morse, of Worcester: Mr. President, in Massachusetts we have a lien law which is not perfect in all respects, but it has been a great advantage to us in our business. Located near the line of Rhode Island, some two years ago they made a lien law there, and it has been very advantageous so far as we are concerned. In sixty days you present your bill and if it is not paid you have a right to put a lien upon the property, and I have been so situated that I have been paid my bill within forty-three hours of the prescribed time, and I have got my pay every time. Now, I hope, in all fairness, that we shan't recommend the abrogation of the lien law. We have traveled for quite a while under this present system (I am referring now to New England), and when we have a good thing, don't let that go until we find something better; don't give up a good thing for an uncertainty.

Mr. Madden, of Chicago: Mr. President, I just want to say a word. I will not take up the time of the gentlemen of this convention. On behalf of the people engaged in the stone cutting and rough stone business in our city, I desire to say that the delegates from Chicago to this convention, representing their interests, are instructed to vote against the resolution recommending the abrogation of the lien law. (Applause.)

E. D. Miller, of Baltimore: Mr. President, it has been stated here today that the lien law was instituted in the State of Maryland by George Washington and Thomas Jefferson. We have never regretted it to this day, any more than we have for one moment lost confidence in those two great and celebrated men. (Applause). And allow me to say that I think it would be just as easy a matter to throw over from its foundation that shaft that has been erected to the memory of George Washington as to abolish the lien law in the State of Maryland. (Applause).

After considerable discussion, on motion by Mr. Prussing, of Chicago, the subject was laid on the table for one year, and the session adjourned.

## THIRD DAY—MORNING SESSION.

At 10:30 A.M. January 29, President Scribner called the convention to order and the roll was called by Assistant Secretary Voshall.

The Secretary: A telegram has been received from London, England, from the Master Builders of Great Britain: "To the National Association of Builders of the United States: Congratulations." They are meeting at Bedford street, Strand, London, today. It occurs to me, Mr. President, it would be wise for us to send a cable message to the Master Builders Association of Great Britain if possible today, tendering our congratulations to them. And in this connection, I will remind the convention that we have, since we have been sitting here, received cablegrams from Egypt, Australia and London, showing that our endeavor and our action is certainly meeting with recognition all over the world.

The secretary was authorized to answer all of them.

The President: The regular question of the morning, gentlemen, will be the consideration of the recommendation of the Executive Committee and the resumption of the discussion of shorter hours than those now in vogue.

The following recommendation offered by the Executive Committee was again read by the secretary:

In view of the fact the national government and many state and municipal governments have enacted that not more than eight hours' labor may legally be required in the limits of a day, and in view of the fact that, in many of the building trades in various cities of the country this standard number of hours is

already established, the National Association of Builders, in convention assembled, recommends all its filial bodies to advise all contractors in their various memberships to so arrange their affairs and make their estimates and contracts that they may safely meet, in the near future, the altered conditions which a general adoption of this standard number of hours of labor would entail.

And in view of the fact that the only safe method of changing the recognized limits of a day's work is through the system of payment by the hour for all labor performed, the National Association cannot recommend any reduction of the prevailing hours until this system is more unanimously established; but advises and urges filial bodies to secure the general adoption of this system of payment by the hour, so that they may through that, also, be in a safer condition to meet a change in number of hours, should the condition by which they find themselves surrounded in their various localities make it advisable for them so to do.

The National Association again declares that its purpose is, and always has been, not to interfere with or attempt to control or dictate to its affiliated bodies in any of their specific actions, in the assumption that they are the best judges of the situation and conditions which surround them; but it desires always to give its membership the amplest opportunity for information on all subjects in which they are concerned, and in which the experience and judgment of each may strengthen and benefit all in the setting up of a general policy for the guidance of all.

T. P. McKellegett, of St. Louis, moved to amend the recommendation of the Executive Committee by adding the following:

Amend the report of the Executive Committee by adding the following: The fourth National Association of Builders recommend, as far as practicable, in the construction of buildings, that eight hours shall constitute a day's work for all mechanics employed on and in the construction of the same.

The President: Does Mr. McKellegett's amendment receive a second?

Mr. Dunck, of Milwaukee: I will second it.

Mr. Sherry, of Boston: Mr. President, believing as I do that it is an impossibility to pass this resolution on the eight-hour system, I wish to offer a substitute.

Recognizing the agitation for shorter hours of labor than those now prevailing, the National Association of Builders in convention assembled declares that, as a central body, representing so many different constituencies, it is not competent or proper for it to define a certain number of hours for the building trades generally to adopt, but that it should be left to the local bodies to adjust the number of hours of labor as circumstances and conditions by which they are surrounded may dictate; but we do believe that this body should persistently urge upon all local bodies that the thorough establishment of the system of payment by the hour is an absolutely necessary safeguard, and that they should earnestly labor to secure the establishment of that system.

Several delegates seconded the substitute.

Mr. Purington, of Chicago, offered the following resolution as a substitute:

*Resolved*, That this association deems it inexpedient to take any action on the question of the eight-hour day that shall interfere with or in any way hamper the local exchanges affiliated with this body.

Mr. Eidlitz, of New York: I second that motion.

After a lengthy discussion the substitute of Mr. Purington was withdrawn, the amendment of Mr. McKellegett was withdrawn, and the substitute offered by the Boston delegation adopted by a vote by delegations, in which one hundred and eleven voted in the affirmative, and four votes — Detroit one, East Saginaw two, St. Joseph, Mo., one — were cast in the negative.

The President: The chair declares the substitute carried by an overwhelming majority, nearly unanimous.

The Secretary: The following communication has been received since the morning session was called to order:

EXECUTIVE BOARD OF THE BRICKLAYERS' AND MASONS' INTERNATIONAL UNION OF AMERICA, SECRETARY'S OFFICE,
KANSAS CITY, MO., January 24, 1890.

*W. S. Sayward, Secretary National Builders' Association, in session at St. Paul, Minnesota:*

DEAR SIR,—Inclosed please find a resolution adopted unanimously at today's session of the twenty-fourth annual convention of the Bricklayers' and Masons' International Union of America, and which I was directed to forward to you to be presented to the convention of the National Builders' Association, which convenes in St. Paul next week. Trusting that the purport of the resolution will be accepted in as good faith and intent as it is sent, and that much good may be derived from the object in view — a better feeling prevail between the two associations, so that intelligence may reason among us in the future — we wish you godspeed in your deliberations, and trust that wisdom tempered with justice will prevail in the councils of your convention. Very respectfully,

THOMAS O'DEY, *Secretary.*

To the National Builders' Association in convention assembled, greeting: We, the members of the Bricklayers' and Masons' International Union of America, in convention assembled, respectfully request that your honorable body formulate general laws to establish a board of arbitration, whereby the difficulties arising between master builders and employés of our craft may be amicably arranged, so as to avoid strikes and all difficulties which may arise.

ALEXANDER DARREA, *President.*
THOMAS O'DEY, *Secretary.*

Mr. Prussing, of Chicago: The spirit that prompted that communication, as I understand it, deserves your considerate attention. (Applause.) Arbitration is the means of guarding against labor troubles, strikes, lock-outs, boycotts and what not. And, gentlemen, any motion that you may make should include the acknowledgment of the receipt of the communication and notify them that a special committee has been appointed by this body to report at our next convention. (Applause.) We are not ready today, perhaps, to dispose of the matter, but we should have a report on that subject to act intelligently at our next convention, and with the consent of the gentlemen who have made motions on the subject, I now suggest to them to alter their motions in this wise: that this convention receive the communication and acknowledge the receipt through the secretary, preparatory to making another motion, after that has been done, of appointing a special committee for the purpose of considering the matter, of which the secretary will of course inform them in his communication. Gentlemen, as much as that you owe to yourselves. (Applause.)

Mr. Prussing's suggestion was adopted as the sense of the meeting and the session adjourned.

## THIRD DAY — AFTERNOON SESSION.

The convention met at 2 o'clock P.M., and on motion of Mr. Purington the calling of the roll was dispensed with.

The Secretary: The following letter has been received from the Builders' Association of California, dated San Francisco, January 27, 1890:

*To William H. Sayward, Secretary National Association of Builders:*

DEAR SIR,—Your circulars in regard to coming convention at St. Paul, Minn., were received too late for this association to send delegates. It was the unanimous sentiment of the members present that this association should affiliate with the National Association of Builders, and we trust to be represented at your next convention. Yours respectfully,

A. JANSEN, *Recording Secretary.*

Mr. Hannan, of Washington: Mr. President, I would like to ask unanimous consent to present this resolution in reference to delegates at large, to be considered now:

*Resolved*, That the presidents of local associations, in office at the time of convening of delegates, be the delegates at large for their several associations for the ensuing year.

As an amendment to the constitution it was laid over for one year.

The Secretary: The following is offered by A. G. Murray, of Chicago:

WHEREAS, There is not sufficient general information as to the remuneration, wage or salary received, hours per day worked, by the industrial classes of the United States; and,

WHEREAS, It is evident were the publication of these statistics more generally distributed and at stated intervals, say annually, it would be the means of creating a more general average as to wages received and hours employed by the industrial classes of the country; therefore, be it

*Resolved*, Believing that the information desired can be best obtained and distributed by the United States government, this convention respectfully petitions congress to enact such laws as are essential to the circulation of such information.

By Lawrence Grace, of Cincinnati:

*Resolved*, That the architects of the United States be requested to specify materials manufactured in this country in writing specifications, so as to encourage home industry.

By John E. Carpenter, of the Builders' and Traders' Exchange, Louisville, Kentucky:

*Resolved*, That the National Association of Builders recommend to its affiliated bodies that when any difficulties or disagreements arise between architects and themselves relative to violations of rules, such affiliated bodies shall immediately notify the National Association secretary, who shall, as speedily as possible, notify all affiliated bodies, through their secretaries, not to make any estimates, or interfere with the matter in question, until the same is reported as settled by the body from which such difficulty or disagreement originated.

*Resolved*, That the above be referred to the proper committee to report at the next annual meeting.

The President: These resolutions will all be referred to the Committee on Resolutions, if there be no objection.

Mr. Beggs, of Wheeling: Mr. Chairman, I would ask unanimous consent of the convention to submit the following resolution from the Builders' Exchange of Wheeling:

*Resolved*, That the National Builders' Association of the United States are opposed to the system of boycotting as practiced by the labor unions of the United States, and that we recommend arbitration by an equal committee, with a chairman, selected for his judicial abilities and reputation for integrity in the community, to cast the deciding vote on all questions affecting the interests of employers and employés.

The President: It will be referred to the Committee on Resolutions.

Mr. Blair, of Cincinnati: In view of the fact that just previous to the adjournment of the morning session, we had a communication from the International Journeymen Bricklayers' Association, in which the matter of arbitration was suggested, I have formulated a resolution, which, with your permission and that of the association, I will read and submit without comment:

WHEREAS, This association has declared itself in favor of arbitration as the best means of settling disputes between employers and workmen, as evidenced in the reports of its three previous conventions; and

WHEREAS, It is desirable to perfect a plan of arbitration feasible and proper for this body to recommend to its filial bodies; therefore, be it

*Resolved*, That a standing committee on arbitration be appointed by the chair to take the whole matter into consideration, and to report at the next convention.

Mr. Beggs, of Wheeling: Mr. Chairman, if I would be permitted to make an explanation, in connection with my resolution, I would state that there has been no action taken by this convention denouncing boycotting, which is the curse of all building trades, and I would very much dislike to go home to my people and tell them that in this large convention assembled here, that question had been ignored. All that I ask, by my resolution, is that we put ourselves upon record that we are opposed to this system of boycotting; that it is non-American, that it affects the interest of every contractor in the United States, and that the principle of arbitration is the only true and correct method of settling difficulties between employers and employés. I would like to see a unanimous vote of this convention upon that question, that we may go before the people of the United States as denouncing this system of boycotting. I do not know what the effect may be in Chicago, or in New York or in the larger cities of the nation, but I know that in my little city it has bankrupted our contractors, it has retarded building in my community and has been a general curse to every moneyed man in the entire state. If you will pardon me for referring further to this question, I will say that I come from a state which has gone through what probably few other states in the nation have gone through. We have gone through the war and have just begun to get upon our feet, and when we have settled this great question which has divided the nation, we are confronted now by our own people with the system of boycotting, which is worse than human slavery. People in my trade and in other trades in my city tell me that I shall not work; go back on that great decree "that a man shall earn his bread by the sweat of his brow." The labor unions of my city have passed resolutions that a bricklayer shall not use a trowel unless he belongs to one of their unions; a plasterer cannot put a patch on a building unless he has a card in

his pocket certifying that he is in good standing in his union. It is time that the national builders of the United States should express themselves upon this question, and we feel that we are doomed, that we will not progress in our state as in Ohio, Indiana, Illinois and in the great western states, if we have not legislation that will enable us to put down this system of boycotting in our country. We ask of you people to give us your voice and your influence, that West Virginia may be placed upon a par with Massachusetts and Pennsylvania and have suitable legislation in regard to these great labor problems that involve the entire interests of the United States. (Applause.) I desire to say, my friends, that we of West Virginia are proud of what the people of the North have done for us. I remember distinctly, before the war, that our great productions in West Virginia were nothing but niggers and blackbirds. (Laughter.) But today, with the influence of the Northern people, with the money which has been sent in there by emigration, in place of raising niggers and blackbirds, we are raising men — great, big, stalwart men. And we owe it to you people and I am here to thank you for it, for that you have done for our state. And in place of our complaining about the war and the effects of the war, or grieving over the loss of our slaves, we went to work and we erected rolling mills and blast houses and planing mills, and are putting ourselves on an equality with the great free states of the nation. (Applause.) I know no other way, my friends, of expressing this than by telling a story. We have an electric railroad down in West Virginia, in Wheeling, and we have only got one.

Mr. President: One moment, Mr. Beggs, if you please. The gist of your remarks, while pertinent, and of course we all agree with you, have been covered by previous action taken, before you were a member of this body, and are largely covered by the resolution now lying before us. We have a large amount of business yet to do this afternoon. If you will be kind enough to make your remarks brief, we shall be happy to have you do so.

Mr. Beggs: May I ask the indulgence of the convention until I tell this story? (Laughter and applause.)

The President: Yes, sir.

Mr. Beggs: It is a new story. One year ago we introduced an electric railroad in the city of Wheeling. It was something that surprised our people. It was a magnificent thing, and our people were very proud of it. One day one of our old colored men, who lived out of the city a few miles, came in to market, and he beheld the railroad, and he went home and told his wife what a grand thing it was; and she expressed a great desire to come into the city the next market day and see it. He consented to bring her. When they arrived on the top of the hill, the electric car was coming up the street. She says, "My God, honey, where did it come from? Who made it? Who made it?" "Now, honey," said he, "if you keep still I'll tell you. Twenty-five years ago the Yankees came down into West Virginia, and they freed the niggers. Now, as God made you, honey, *they come back and freed the mules.*" (Great laughter and applause.) Allow me to thank you, one and all, for this kind reception that I have met at your hands, and allow me to state that in every labor controversy that may arise in our country, you can depend upon West Virginia taking an intelligent view and acting in harmony with the brain of the country. (Cries of "Hear," "Hear.")

The President: A vote of thanks to West Virginia is now in order — moved, seconded and carried.

The question now being upon Mr. Blair's resolution, it was carried.

Mr. Prussing, of Chicago: Mr. President, if it is in order, I would like to have the secretary instructed to give notice of this, our action, in answer to the communication received from the bricklayers' union this morning.

The President: If there is no objection it will be considered the sense of the convention that the secretary be so instructed.

This morning we were to have discussed "Manual Training—Shall the National Association recommend its introduction into the public schools?" The gentleman who was to have opened that discussion not being present has sent a communication on the subject, which, with your permission, will now be read.

Mr. Purington, of Chicago: Mr. Chairman and gentlemen, this paper was written by the first vice-president of the Chicago Exchange, Mr. J. G. McCarthy. He is also chairman of a standing committee of the Chicago Exchange in relation to manual training schools. He has taken a deep interest in it, is a self-made man, self-educated, and stands among those at the head of his profession in Chicago. I am very sorry that he could not have been here to have read this paper himself.

The paper alluded to was then read by D. V. Purington. (Printed on page 8.)

On motion of Mr. Dunck, of Milwaukee, amended by others, a vote of thanks to Mr. McCarthy for his able paper just read, that it be printed in the proceedings and referred to the Committee on Resolutions, was carried.

The President: The next business in order, gentlemen, is the report of the Committee on Resolutions.

A. McAllister, of Cleveland, read the preamble and resolution of Mr. Sullivan upon the matter of sub-contracting, and stated that he had been handed a postal card, which was one of the things which Mr. Sullivan had in his mind but which for some reason he did not introduce in his paper, which read:

"STOCK EXCHANGE, Chicago, January 23, 1890.

"Please call at this office and figure on work in your line. Bids close January 27, 1890. THE OFFICIAL ESTIMATING BUREAU,

[Signed with the stamp.] "Per W. H. F., Manager."

Mr. McAllister: Now, here is an association of adventurers, who rent some offices and send out to contractors asking from them bids on the different parts of the work, which they lump together at what they choose, and propose for the work to the owner or architect. It is hardly worth while to waste any sympathy on a man who would make a proposition to such fellows. When a man deliberately walks into the mouth of a hungry tiger, like this, his friends cannot find much fault if they have to open the tiger in order to get his remains. (Laughter and applause.) But it is quite proper that some action should be taken, that we should endeavor to find out just how much there is and what ought to be done to correct it. Now, with that view the Committee on Resolutions submit the following as a substitute for Mr. Sullivan's resolution:

WHEREAS, Many evil and wrong practices have become prevalent through the present methods of sub-bidding and sub-contracting; and,

WHEREAS, It is for the best interests of both direct contractor and sub-contractor to have a more complete understanding of the rights and practices which should prevail to constitute and comprehend honorable dealings; therefore, be it

*Resolved*, That a standing committee of five be appointed by the chair to take this subject into consideration, to make thorough investigation, and report at the next convention.

Mr. Prussing, of Chicago, moved the adoption of the substitute reported by the committee, which motion was duly carried.

The resolution of Mr. Grace was laid on the table.

The resolution presented by the New York delegation was adopted.

The Committee on Resolutions here requested a little more time, and in the interval the president introduced Mr. Hannan, president of the National Association of Master Plumbers, who spoke of his national association and the benefits derived from association.

The Committee on Resolutions here resumed its report.

Mr. Beggs' resolution was referred to the Committee on Arbitration.

Mr. Murray's resolution was adopted.

The President: The Committee on Resolutions has accomplished its task. We now come to the report of the committee on time and place of next convention and names of officers; Richard Deeves, of New York, chairman.

Mr. Deeves: Mr. President, your committee has the pleasure to report time and place of next convention, and names of officers, as follows:

Time of meeting, the second Tuesday of February, 1891; place of meeting, New York City. (Applause.)

Nominations: For President, Mr. John J. Tucker, of New York City. (Applause.)

First Vice-President, Arthur McAllister, Cleveland, Ohio. (Applause.)

Second Vice-President, Anthony Ittner, St. Louis, Mo. (Applause.)

Secretary, Mr. William H. Sayward, Boston, Mass. (Applause.) I would say here, that there was no other competitor in the field for this position.

Treasurer, Mr. George Tapper, of Chicago, Ill. (Applause.)

Signed, Richard Deeves, chairman; W. R. Stoughton, secretary; Daniel Evans, Richard Smith, R. H. Jenks, committee.

The report of the committee was received and adopted, and the time and place of meeting and the officers were elected as according to the report of the committee.

Upon the election of New York as the next place of meeting, Mr. Eidlitz said:

Mr. Eidlitz, of New York: Mr. Chairman, and gentlemen of the convention, I suppose it behooves me, being one of the oldest men to come to these conventions, that I should thank you, in the name of the delegation of New York Exchange, and the citizens of New York, for the honor that you confer upon us by adopting the resolution to meet next year in New York. I wish that I were able to speak and give utterance to my feelings as I now feel. It is true, from the very first that I have been to these conventions, that it has been my ambition that I should have the honor of seeing you in New York. To say that we will treat you any better in New York than any of the previous cities have done — I do not believe we can do that; but we will promise you that we will do the best we can, and hope that we will be able to detain you in New York so that you can be with us at the opening of the International Convention of 1892. (Applause and laughter.)

The President: Mr. Tucker, we would like to hear from you (Applause).

Mr. Tucker: Gentlemen, soon after the conception of the idea of this National Association, I became aware of the desire to form such an organization. I have been regularly with you at every gathering you have had. The pleasant faces that have always met us throughout its deliberations, throughout all the business it has conducted, have inspired confidence and encouragement for the future of this body. I am glad to be with you again today, and will say I assure you that I appreciate the high honor you have conferred upon me today, and thank you for this mark of esteem which has been shown by electing me to the presidency of the National Association of Builders. Realizing the importance and weighty responsibilities attached to the office, I trust I shall be able to so discharge the duties devolving upon me as to merit your approbation, and in such a manner as will redound to the interests of the association. I also desire to acknowledge the compliment as to the city of New York; and should the next convention be held there, as we expect it will be, we promise you the same hearty welcome which has attended all our conventions, and shall esteem it a pleasure no less than a duty to make your visit a profitable and agreeable one. Gentlemen, I thank you. (Applause).

Mr. Tapper: Mr. President and gentlemen of the convention, I thank you for the honor that you have conferred upon the city that I represent — that little village on the lakes — and I also thank you for

your confidence in electing me treasurer for the third time. I assure you the duties of the treasurer are very arduous indeed; there is a great amount of money to be taken care of, but with the assistance of my friend Sayward, I have managed to take care of it pretty well. (Laughter.) But, gentlemen, I will not take up your time, because there is a great deal of business to be done here, in trying to make a speech. I could not do it if I tried. I thank you for the honor you have conferred upon me.

The Secretary: The following amendment has been proposed to Article IV of the constitution, and has been duly notified in the way and manner provided by the constitution:

"Any person having served a term as president of this association shall by virtue of that service become a permanent director, in addition to the directors already provided for."

David A. Woelpper, of Philadelphia: Mr. President, I offer a substitute to that amendment, and with your permission would like to read it. This was passed by a meeting of our exchange held December 24:

*Resolved*, That all retiring presidents who shall have served a full term of office shall be considered advisory members of the Board of Directors, but shall have no vote, provided that it be at no expense to the National Association or local associations.

After considerable discussion, the whole subject was laid on the table.

The President: Under the head of new business (which we have just been treating) will come naturally the question of the per capita assessment for the coming year for the support of the national organization. Your Board of Directors at the last meeting discussed this subject very thoroughly, in all lights, and decided to recommend to you the sum of $3 per capita, for the reason that it seemed very evident to them that the sum heretofore paid in was not sufficient to enable your Executive Committee properly to do its duty; that the demands upon it were much greater, in view of the need of missionary work, the need of the secretary in the way of assistants, he being already largely overworked; and they felt inasmuch as the statement was made there and then that a close calculation showed that the assessment of $2 per capita as heretofore paid by each local exchange amounted to an assessment of just ¾ of 1 cent per day to each member, that we could well afford to go home from here and ask our local exchanges to increase the amount 50 per cent. The subject is now before you.

Mr. Smith, of Omaha: Mr. President, I move you that the increase be adopted.

The motion was seconded by Mr. Woelpper, of Philadelphia, and after considerable discussion, pro and con, on motion the vote was taken by exchanges as follows:

Baltimore (not present); Boston, seven votes for $3; Brooklyn, two votes for $2; Buffalo, two votes for $3 and one for $2; Chicago, two votes for $2 and ten votes for $3; Cincinnati, three votes for $2 and one for $3; Cleveland, two votes for $3; Denver, two votes for $3; Detroit, three votes for $3; East Saginaw, two votes for $3; Grand Rapids, two votes for $3; Indianapolis, three votes for $2; Kansas City, four votes for $3, one vote for $2; Louisville, two votes for $2—the delegates, however, willing to advocate to their exchange $3; Lowell, three votes for $3; Milwaukee, three votes for $3; Minneapolis, three votes for $3; New York, two votes for $2, six votes for $3; Omaha, three votes for $3, "and $5, if necessary." (Applause.) Philadelphia, seven votes for $3; Portland (not present). Pittsburgh, three votes for $3; Providence, three votes for $2; Rochester, four votes for $3; St. Joseph, three votes for $3; St. Louis, six votes for $3; St. Paul, four votes for $3; Sioux City, two votes for $3; Syracuse, two votes for $3; Washington, two votes for $2, (but two delegates present.) Wheeling (not present.) Wilmington, two votes for $3; Worcester, two votes for $2.

Mr. Harris, of Philadelphia: Mr. President, in consequence of the dissatisfaction evinced by some of the delegates (and very justly so from the knowledge of their local institutions), I desire to move you, sir, that the Executive Committee do not draw this extra dollar except it is a real necessity, so that they can go back to their associations without having an arbitrary tax fixed. The possibility is that the money may not be wanted, and it will not be wanted for possibly nine or ten months, and we can hold these associations in that long, and by that time they may be in a better condition to pay. I make that motion.

The President: The chair would like to say one word on that subject, if you will allow him. His little experience, and it is not very small, in connection with the management of affairs connected with our association, teaches him that one of the most crippling facts connected with the administration has been that so many of the exchanges have failed to see the importance of paying promptly their per capita. I wish to tell you, gentlemen, that when Mr. Sayward wrote me at different seasons of the year, as to whether he should go on this tour, or whether he should go to that city or another city which was writing for him to come there, in order to aid them in strengthening their exchanges or in forming new ones, he would say to me, "such a city, and such a city, and another city has not yet paid its per capita; if they do, we will have about so much money; what do you advise?" We had to sit down, gentlemen, and count dollar by dollar. We had to figure out that a certain trip would take about so many days, that it would cost about so much per day. Now, it is not a question of the secretary's salary, by any means. It is a question as to whether we want this association to grow and to become what it is possible that it may become. Do we want to cripple it for a miserable $1 per head? (Applause.) Why, gentlemen, I am surprised at you! That is to say, not you—I understand that the delegates here are ready enough to pay $3 per capita, you are only fearful that your people at home will not think you have done right; that they will not appreciate the situation. I can see that that is so. Every man who comes here to attend one of our conventions, no matter with what ideas he may come, goes home converted to the idea that this association is worth ten times what it costs. And I want to say to you, right here, gentlemen, although I am telling tales out of school, that your Board of Directors at its last meeting, in talking over this per capita tax, when recognizing the difficulties under which we were laboring in going home to our exchanges and asking them for that increase, very readily and very generously said, "I will give you $100." They were all ready to chip in, but the secretary would not admit of anything of the kind. He felt that that was somewhat of a charity, and we had to admit it. Then, again, the suggestion was made that we set the per capita at $2 and at the end of the year we could draw for whatever deficit there might be. But as business men we felt that that was no way to do. We want to know, we want the secretary to know, our president of the coming year wants to know, that he can rely upon about so many thousand dollars to carry this thing through the next year. If you do not want it, that is all right. I admit if you increase the per capita you may lose one exchange, or two or three, possibly half a dozen. I do not know. I do know that if you do not increase it, you will not grow as you should. You are crippled.

Assistant Secretary Voshall: Those voting for $3 per capita, eighty-eight; for $2, twenty-five. (Applause.)

The President: As the chair understands, then, the $3 will be the per capita for the coming year. And I do hope that no delegate here will be blamed when he gets home for the course pursued. I do hope that he will be able to show them that this institution is worth a great deal more money than it is costing. What is ¾ of a cent per day per head, or 1½ or 2 cents?

Now the chairman wishes to announce the appointment of some committees which are called for. The Standing Committee of five on Arbitration, which it is the duty of the chair to appoint, is as follows: J. Milton Blair, of Cincinnati, chairman; Anthony Ittner, of St. Louis; David A. Woelpper, of Philadelphia; Marc Eidlitz, New York; George C. Prussing, of Chicago.

Standing Committee on Sub-Contracting: James A. Miller, of Chicago; Stacy Reeves, of Philadelphia; W. A. Kelly, Kansas City; Samuel Farquhar, Boston; Abraham Rasner, Pittsburgh.

In the election of directors, it is the duty of each delegation to name one of the members of their exchange to act as a director during the ensuing year.

The secretary then called the roll of delegates, and nominations were made for directors, as follows:

Boston, L. B. Soule; Brooklyn, F. J. Ashfield; Buffalo, James Boland; Chicago, Geo. C. Prussing; Cincinnati, Lawrence Grace; Cleveland, Robt. H. Jenks; Denver, G. F. LeDue; Detroit, Wm. J. Stapleton; East Saginaw, Geo. C. Cwerk; Grand Rapids, H. E. Doran; Indianapolis, James E. Shover; Kansas City, W. A. Kelly; Louisville, Thos. Armstrong; Lowell, James W. Bennett; Milwaukee, Clifford Chase; Minneapolis, Bartlett Cooper; New York, Marc Eidlitz; Omaha, William Smith; Philadelphia, William Harkness Jr.; Portland, A. D. Smith; Pittsburgh, T. J. Hamilton; Providence, James S. Hodson; Rochester, William H. Gorsline; St. Joseph, John DeClue; St. Louis, Thos. J. Kelly; St. Paul, M. G. Craig; Sioux City, Frank Clark; Syracuse, John Moore; Washington, Thos. J. King; Wheeling, G. W. Beggs; Wilmington, Archibald S. Reed; Worcester, H. W. Eddy.

The foregoing gentlemen were declared duly elected directors for the ensuing year.

Mr. Adams, of Indianapolis: Mr. President, the time has about arrived when we will conclude the deliberations of this convention, and in a few hours we will say the words good-by to our friends in the Twin Cities of the Northwest. From the time we set our feet upon the ground of this city until the present, we have been confronted by some gentleman with a badge upon his lapel, who has cared for every want, who has made our comfort and our convenience his purpose and aim; and, it is proper that we take some steps in recognition of the hospitality of the gentlemen of this exchange, and with the permission of the convention and the secretary I will read the following:

*Resolved*, That the thanks of this, the fourth convention of the National Association of Builders are hereby extended to our hosts, the members of the St. Paul and Minneapolis exchanges, and the several committees having in charge the arrangements for the convention and the entertainment of delegates and visitors, as well as the citizens of these cities and the committee of ladies for their bounteous and full-handed hospitality, their untiring efforts in anticipating our every want and contributing by every means in their power to our comfort, pleasure and happiness, thus making our visit to these cities long to be remembered.

The resolution was adopted by a rising vote.

The Secretary: Mr. President, I have, also, a resolution to offer:

*Resolved*, That the recognition and thanks of the convention are due and are hereby extended to the press of the Twin Cities, St. Paul and Minneapolis, for the courtesies extended, and the enterprise shown in publishing promptly such complete reports of the proceedings of this convention.

This resolution was adopted by a rising vote.

In answer to a vote of thanks proposed by Mr. Prussing, Mr. Scribner said:

Gentlemen, I can but thank you most heartily for the courtesy I have received on all hands during the convention just closed. I must confess that I looked forward to the duties devolving upon me here with considerable solicitude and some anxiety, but I wish to acknowledge to you now that owing to your courtesy, owing to your leniency with faults or mistakes of judgment, owing to the fact that you have so ably assisted me I have thoroughly enjoyed these three days, and it is with great regret that I now part with you.

Mr. Purington: I move we now adjourn.

The motion was then seconded and carried, and the convention adjourned to meet at New York, the second Tuesday in February, 1891.

## CONVENTION NOTES.

The proceedings are a transcript from the report of the official stenographer of the convention, Mr. N. S. Hillman, of St. Paul.

The delegates from Washington, Baltimore and Philadelphia, accompanied by alternates and visitors, went in a special train over the Baltimore & Ohio Railway. At Chicago two more cars were added, containing the Chicago delegation, the train going the remainder of the distance over the Chicago, Burlington & Quincy Railway. The time made was fast, and the attendance of the officials was warmly praised by the travelers. As the Chicago delegates stepped aboard the Burlington special at Chicago they were warmly greeted by their eastern friends. The delegates from Baltimore were accompanied by Architect Charles L. Carson, who was highly spoken of by the Baltimoreans as an architect and a gentleman. The remainder of the alternates and visitors were Mrs. E. L. Bartlett, J. F. Lawton, wife and daughter; George Mann, William Ferguson and wife, C. Elliott, J. L. Guilbert, wife and son; Master Franklin Scott, J. S. Filbert, P. M. Womble, Jr., George Punnicke, C. L. Carson and wife, C. H. Miller. Mr. George Mann is a Scotchman and a stone contractor. He was the life of the party, though his companions heartily seconded him in his efforts to entertain all visitors to the Baltimore car. His fund of Scotch anecdote and poetry was remarkable. Beside many lines from Burns, he repeated an excellent poem composed by a Baltimore poet (also a Scotchman), which ended with

> "And if I cannot climb her hills,
> Nor wander by her shore,
> I'll seek nae fairer spot to bide
> Than bonny Baltimore."

The Washington alternates and visitors were: A. L. Littlefield, H. A. Janes, Charles Schneider, Charles Andrews, John Galloway, Charles T. Wood, Thomas P. Stephenson, John Thomas, J. H. Bryam, Morgan Thomas, H. F. Gets, Justin McCarthy, Harry Schneider, J. W. Carr.

The Philadelphia contingent was by far the largest that attended from any one city, being composed of the following alternates and visitors beside the delegates.

Alternates: Charles G. Wetter, William B. Carlisle, David A. Watts, William Conway, W. Howell Rea.

Visitors: William Peoples, Mrs. William Peoples, Washington J. Gear, Jr., Mrs. W. J. Gear, Henry Reeves, John A. Einwechter, William H. Gross, Richard H. Watson, John N. Gill, Miss Jeannetta Harkness, T. Milton Shafto, A. B. Barber, James J. Quigley, Alfred P. Shannon, L. Schwab, R. C. Ballinger, Thomas H. Doan, Jacob L. Tyson, John Atkinson, Howard R. Deacon, James C. Taylor, George W. Roberts, Joseph B. Hancock, James B. Doyle.

The train was in charge of Passenger Agent McKenzie, of the Burlington road, who stayed with the delegates and returned with them, devoting himself to their comfort, and earning for his road the good opinion of every passenger. The Burlington route to St. Paul is the most picturesque of all roads from Chicago to that city, following, as it does, the Mississippi river from the Illinois line through the hill country to St. Paul. The train arrived at St. Paul on time, and on the return it stopped over at Chicago twenty-four hours, enabling the eastern visitors to see the Auditorium and many other newly completed buildings.

E. J. Hannan, president of the National Association of Master Plumbers, was among the delegates from Washington.

The youngest visitor and the most popular among those so fortunate as to make his acquaintance was Master Franklin Scott Guilbert, from Baltimore. He is less than four years old and was "good as gold" the entire trip. Many delegates asked for and received his photograph, which is highly prized by the recipients. He may be president of the association one day.

Mr. and Mrs. John M. Canda, of New York, visited the Auditorium while in Chicago and admired its architectural beauty. Mr. Canda was particularly pleased with the amber shade with which that great assembly hall is decorated.

E. L. Bartlett, a delegate from Baltimore, was spoken of as the proper candidate for the second vice-presidency, but declined the honor. An unwritten law of the association is to elect vice-presidents in the line of the presidency and when elected to that office to hold the convention where he resides. Presidential timber is scarce, and Mr. Bartlett is so fitted to the office that it is hoped he will be ready to accept next year, as the office should again be tendered to him.

Architect Carson no doubt issued a final certificate to the Baltimore delegation, as evidence that their contract was fully performed and in every way conformed to the specifications.

The standard form of contract was the only one recognized by the delegates. It was noticed, however, that it was occasionally slightly altered to suit individual taste. For instance, a New York delegate was heard to say, "I'll take a little gum in mine."

The Philadelphia delegation had within its numbers every trade required to complete a building, and it was discovered that even a banker and a conveyancer was not wanting.

It was amusing to the delegates to see the spirit of rivalry existing between the Twin Cities. It may seem very real and serious to those living in either city, but to those at a distance it looks very ridiculous.

L. H. L. Davis, of the St. Paul Entertainment Committee, and in which position he made many friends by his untiring efforts for their comfort, has left St. Paul for Chicago, and is with the stained glass house of Johnson & Co.

The local association of plumbers gave a dinner to the visiting plumbers.

While it is thought best to give the entire space in this number to the work of the convention, and publish the only complete stenographical report of its transactions, there were many speeches at the banquets given the visitors at St. Paul and Minneapolis that well deserve recording, and the entertainment provided guests in either city was as perfect as it was possible for money and brains to make it. Both are equally plenty in the Twin Cities, and are lavished upon visitors with a freedom that speaks only of good fellowship and a desire to please.

The most enjoyable feature of the banquet, and withal the most significant, was the speech made by Archbishop Ireland, in response to the toast, "The Workingman."

As a handsome souvenir of the convention the Contractors' and Builders' Board of Trade presented its guests at the banquet with a handsomely printed and bound menu, containing photogravures of many of the fine buildings, with brief descriptions of each.

Mr. F. G. Draper, chairman of the Entertainment Committee, is one of the most pushing, as well as entertaining men in the building business in the Northwest. His popularity with architects is as wide as his acquaintance, and into the work of entertainment he carried his natural enterprise and sagacity so thoroughly that the Exchange will owe to him much of the credit which it has won through its most thoroughly carried out entertainment programme.

One of the most interesting of the many entertainments given the visitors was a sleigh-ride, participated in by the ladies exclusively. The Entertainment Committee placed at their disposal a magnificently equipped sleigh, shaped as the hull of a vessel, with room for upward of fifty persons. S. P. Spates, chairman of the Reception Committee, and that general favorite, especially with ladies, Mr. John McGlensey, of New York, took charge of the precious cargo, and, of course, the ride was a success. The following ladies participated: Mrs. J. J. Tucker, Mrs. Richard Deeves, Mrs. C. A. Cantrell, Mrs. Marc Eidlitz, Mrs. John M. Canda, of New York; Mrs. John Rawson, of Grand Rapids; Mrs. J. E. Shoner, Mrs. J. E. Pierson, Mrs. Lee Pierson, Miss Grace Adams, Mrs. A. M. Kuehn, Miss Clara Shoner, of Indianapolis; Miss Jeannetta Harkness, Mrs. W. J. Gear, Mrs. William Peoples, of Philadelphia; Mrs. W. A. Sherry, Mrs. J. Wirtwell, Miss A. G. Grant, Mrs. J. Nixon, Mrs. Samuel Farquar, Mrs. James D. McClellan, of Boston: Mrs. J. L. Guilbert, Mrs. E. L. Bartlett, Mrs. J. F. Lawton, Miss Lawton, Mrs. William Ferguson, Mrs. C. L. Carson, Mrs. Bevan, of Baltimore; Miss Carrie L. Snead, Miss Juliet Morris, of Louisville; Mrs. Frank S. Wright, Mrs. W. H. Iliff, Mrs. J. F. Barney, of Chicago; Mrs. J. Milton Blair, Mrs. Arch Colton, Mrs. H. L. Thornton, Mrs. W. C. Winstandley, of Cincinnati. The St. Paul ladies who accompanied the guests were Mrs. E. E. Scribner, Mrs. S. P. Spates, Mrs. D. S. B. Johnston, Mrs. Williams, Mrs. Walter Stevens, Mrs. Wolsey.

## Missouri State Association of Architects.

THE sixth annual convention of the Missouri State Association of Architects was held in the Midland Hotel, at Kansas City, on February 11 and 12, 1890, having been postponed from the regular date of January 14.

The meeting was called to order by President E. F. Fassett, of Kansas City, and Secretary James Oliver Hogg, of Kansas City, called the roll, the members present being as follows: E. F. Fassett, James Oliver Hogg, H. B. Prudden, W. F. Hackney, W. S. Mathews, G. M. D. Knox, Adriance Van Brunt, Walter C. Root, George Carman, S. E. Chamberlain, John Van Brunt, H. Probst, F. B. Hamilton, W. W. Polk, J. C Sunderland, C. B. Hopkins, of Kansas City; John Beattie and Theodore Carl Link, of St. Louis; R. C. McLean, honorary member, Chicago. During the convention E. T. Carr and T. H. Lescher, of Topeka, Kansas, and W. E. Rose, of Kansas City, and F. E. Hill, of Kansas City, were given the privileges of the floor.

The secretary read the minutes of the previous meeting at St. Louis, as officially published in THE INLAND ARCHITECT for January, 1889, and they were approved as published. President Fassett made the following address:

### PRESIDENT'S ADDRESS.

In considering the responsibilities of the position which has been conferred upon me, and recalling the experience and ability of those who have preceded me, it is with feelings of solicitude that I address you upon this, our sixth annual convention. I sincerely beg that you will accept my thanks for the honor conferred, and, asking your indulgence, will present a few matters for your consideration.

The limited number in attendance at the sessions of 1888 and 1889 suggests the thought of whether or not we are receiving those benefits from our state association which are so essential to the realization of the objects desired and as set forth by our constitution. I would suggest that decisive and prompt action be taken at this session to further promote the enlargement and usefulness of the association.

With a membership the largest of any architectural association west of the Mississippi river, we should use every effort to keep it as such. By the dropping of names for non-payment of dues and by removal of members from the state the membership has decreased about one-fourth since the session held in St. Louis, January, 1889. For the year ending January 14, 1890, we have hardly held our own, but trust that at our next annual convention, we may show a large and influential increase in membership.

The display of drawings and sketches at each annual meeting should meet with greater consideration and individual help; such displays cannot fail in being a great benefit to each individual member, and further, the exhibition might, with great profit, be open to the public. I would suggest that a committee be appointed, to report at this meeting, on the advisability of awarding prizes of some character for the best drawing or sketch at the session of 1891.

It is to be regretted that no signal success has been attained since our last session in matters relating to special legislation, especially in regard to the examination and licensing of architects, and protection under the lien law. Experience obtained during the past year, in endeavoring to procure legislation of benefit to the profession impresses me with the fact that in the matter of liens our chances are small. I am fully of the opinion, however, that a case properly handled and argued before our highest courts would receive a verdict in favor of the architect, and allow him a lien under and by virtue of our present laws. In Utah, in a case pending before the United States Court, a judgment was given in favor of the architect, and allowing him a lien upon the premises.

The most important idea or object to be gained, in the matter of state examination and license for architects, is first to convince the public that such a measure would be beneficial and essential for the public good. How this object

can be placed before the public in a plain and beneficial manner is for your consideration. The bill, covering such examination, and referred to a special committee, was not pressed before the legislative assembly in 1888-89 for various reasons, which will probably be made known through your legislative committee. I would most respectfully suggest that the Committee on Legislation be continued or a new one appointed, and that they be instructed to use all possible efforts to further the progress of the bills now under consideration.

The advancement and success of our State Association depends entirely upon the effort of each individual member. We may safely predict that by constant uniformity of action we shall be enabled to place our profession upon a higher and firmer basis, and convincing the most doubtful of the importance and necessity of its organization, and membership will be sought after, not only as a privilege, but as an honor.

There are many members who, by reason of not attending the meetings of the association, have failed to become convinced of the advantages to be obtained, not only for themselves, but to the profession at large. Again, there are many engaged in the honorable practice of architecture, whose membership would be an advantage, not only as an increase of membership, but in aiding and supporting the work of the association. An earnest effort by each member would result, no doubt, in a large increase of influential, reliable members.

You will probably be called upon to take some action relating to the advisability of making the State Association a chapter of the American Institute. Should you decide in the affirmative, it will be necessary to take some action relating to changes in the constitution and by-laws, and classification of membership.

In closing these few remarks, I have but to remind the members here present that these yearly gatherings of ours are but chances for consultation and discussion upon subjects that concern the upbuilding of the profession. Individual action is necessary between these meetings, to assist in uniting all, directly or indirectly interested in architecture, in efforts designed to promote the scientific, practical and artistic efficiency of the profession, encouraging the study of kindred arts, and obtaining a higher code of professional ethics.

The address was received with applause, and the Executive Committee submitted the following as its report :

REPORT OF EXECUTIVE COMMITTEE.

MR. PRESIDENT AND GENTLEMEN OF THE MISSOURI STATE ASSOCIATION OF ARCHITECTS: Your Executive Committee beg leave to report as follows :

There have been three meetings of the Executive Committee during the year. At the first meeting in St. Louis at Lindell Hotel, with all members of the Executive Committee present, the names of G. M. Heimburger and August Weber, of St. Louis, and M. J. K. Guinotte, W. C. Root and C. B. Hopkins, of Kansas City, Missouri, were elected to membership, a gain of four members over the preceding year. The second meeting of the Committee was held at St. Louis, Missouri, December 16, 1889, at which only business pertaining to the annual meeting, to be held in Kansas City, January 14, was transacted. On January 7 three members of the Executive Committee met with the members of the Kansas City Society, there being only three members of the Executive Committee present; but after a general discussion by the Committee, and after reading a letter from Mr. Illsley, it was decided to postpone the annual meeting to February 11, 1890, in order to hear from the Committee on State Chapters of the American Institute of Architects. At a meeting of the Executive Committee, held February 11, 1890, the following gentlemen were dropped from the membership roll for non-payment of dues : P. F. Maher, of St. Louis ; J. W. Herthel, of St. Louis ; L. L. Levering, of Kansas City, Missouri ; leaving a membership of fifty members in good standing.

JAMES OLIVER HOGG, *Secretary.*

Received and placed on record.

On motion of W. S. Mathews the report was adopted. The secretary submitted the following report :

SECRETARY'S REPORT.

*To the President and Members of the Missouri State Association of Architects:*

GENTLEMEN,—In accordance with section 5 of the constitution of this association I now make my annual report. The minutes of our last meeting were published in full in THE INLAND ARCHITECT of January, 1889. There has been very little correspondence carried on between members of the association and the secretary, but such letters as came were duly answered. There has been added to the association four new members since our last meeting, the names of which are reported in the report of the Executive Committee. There have also been dropped from the roll of membership three members for non-payment of dues, and one member, Mr. P. P. Furber, has sent in his resignation, making a total of four dropped. Last year E. F. Fassett, secretary, reported fifty members in good standing. Your secretary reports fifty active members for 1890. Your secretary has received publication from third annual convention of the National Association of Builders, the minutes of convention of the American Institute of Architects for 1888, which have been duly acknowledged, and, according to recommendation of former secretary, I procured a record book for keeping the proceedings of this association and had the same properly stamped. In matters of legislation we have made very little progress. As our efforts to have the lien law amended as recommended at our last meeting have proven futile, although a committee consisting of members of the Missouri State Association, both from Kansas City and St. Louis, and a committee from Kansas City Society, visited Jefferson City to urge its passage, likewise the bill brought before the legislature to license architects, your secretary was never able to find out whether the bill introduced into the legislature exempting architects from municipal taxation, the same as lawyers, clergymen, teachers and other professional gentlemen, was ever passed or not. All three questions should be thoroughly discussed at this meeting.

JAMES OLIVER HOGG, *Secretary.*

A report from the Kansas City Society of Architects was read by the secretary, as follows :

*To the President and Members of the Missouri State Association of Architects :*

GENTLEMEN,—As secretary of the Kansas City Society of Architects, I beg leave to report as follows : We have a total membership of twenty-four active members, a gain of three members since our last report. Our meetings have been very well attended. One member, Mr. H. E. Hill, has withdrawn from the society, and was elected an honorary member. The very best of feeling exists among the members of Kansas City Society, and we stand together as a unit. Our most effective work has been getting one of our number appointed superintendent of buildings, and getting an ordinance introduced in the city council, which would consist of the superintendent of buildings, and two fellows of the Kansas City Society of Architects, to act with two contractors in formulating a new building ordinance. This work of the committee has been done but has not as yet been passed by the council, we are assured that it will come before that honorable body in a few days. There has not been a single case of unprofessional conduct reported to our society, and we feel that in "union there is strength," especially to us.

Very respectfully,

JAMES OLIVER HOGG, *Secretary.*

On motion the report was received and placed on file.

The report of Treasurer Beattie showed $167.37 in the treasury after all bills had been paid to date. The treasurer's accounts being audited by Messrs. Mathews and Link, the committee appointed by the chair, they were reported correct. The report of the legislative committee was called for, and in the absence of the chairman President Fassett reported that after reviewing the facts in the case of the adoption of the lien law bill by the legislature of the state, in 1886, and the omission of the word architect, etc., he stated that when the committee went to Jefferson City it failed in its object because the senate committee on special legislation failed to act, and the bill had not been acted upon. The license bill had been changed and incorporated with that of the Texas state bill. This had not been pushed by the committee because Mr. McGrath, who was a member of the association, said that he would propose amendments, and as these would virtually destroy the vitality of the bill, and as that gentleman had considerable influence all action had been withdrawn in the premises.

Mr. Hogg moved that the report be received and a committee of seven be appointed for further action. The motion passed and the committee was appointed by the chair.

The reports of committees having been received the following resolution was presented by Mr. Van Brunt :

*Resolved*, That the courtesies of the Missouri State Association of Architects, now in session, be extended to the members of the National Electric Light Association, now in convention assembled in Kansas City, and that they be invited to inspect the exhibit of architectural drawings.

The resolution was adopted and the secretary directed to send the same to the association.

The main business of the convention, the reorganization of the State Association into a State Chapter of the American Institute of Architects, was next introduced.

The secretary read a letter from J. W. Root, secretary of the American Institute of Architects, and requested R. C. McLean, as one familiar with the subject, to advise the association upon the proper course to take, as it had been suggested by some that the State Association might be abandoned and the work left to local associations in Kansas City and St. Louis, it being understood that this course was especially favored by the architects in the latter city.

Mr. McLean stated that his position in the matter was anomalous, but that his attitude was the broad one of the general good of the profession. As he understood the policy of the Institute it was to secure the formation and subsequent coöperation of chapters in every state and city where work could be done. That state associations in every state in the Union was the first necessity. If the state association in Missouri were abandoned and the two cities spoken of should form local associations, what would the architects in the smaller cities do? They might not wish to apply to St. Louis or Kansas City for membership. Again, these cities were not walled in and their architects did not practice exclusively at home, and in whatever city or town they erected a building there their interest lay, and they would be beyond the jurisdiction of their local chapter. These were some of the minor reasons why state chapters should be supported. A greater reason was that the main work of the associated profession at present was in the securing of proper legislation, and in this the name of a state chapter, with members scattered throughout the state, would have infinitely more force than a local association. Mr. McLean stated that this was the unwritten policy of the Institute, and that it would not only be a damage to their own state to abolish the state organization, but it would establish a bad precedent for other states. Mr. McLean closed his remarks by stating that he did not intend to influence the members in a matter that belonged to themselves to decide, but such was the broad policy of the national body, and such was his opinion in the matter, given rather by way of information than as argument, but hoped that the members would see the greater advisability in continuing the state organization as a chapter of the Institute.

The secretary read a letter from C. E. Illsley, who was unavoidably absent, which stated that he did not favor the abandonment of the state organization, as it was contrary to the policy of the American Institute.

After considerable discussion, a resolution offered by W. C. Root was passed, expressing it to be the sense of the meeting that it should reorganize as a chapter of the American Institute. It was suggested that the meeting adjourn to 11 o'clock the following day, and that an informal meeting be held at 10 o'clock, composed of the architects present, to discuss the formation of a state chapter under the rules of the American Institute of architects. The session then adjourned.

SECOND DAY—MORNING SESSION.

The architects attending the convention met informally at 11 o'clock for the purpose of forming a state chapter of the American Institute of Architects. The following architects being present :

E. F. Fassett, J. C. Sunderland, W. C. Root, W. S. Mathews, H. Probst, H. B. Brudden, J. Van Brunt, A. Van Brunt, L. E. Chamberlain, W. W. Polk, George Carman, G. M. D. Knox, James Oliver Hogg, of Kansas City ; and Mr. John Beattie and Theodore C. Link, of St. Louis. Mr. E. F. Fassett, of Kansas City, was elected temporary chairman, and James Oliver Hogg temporary secretary.

On motion the following committee of five, to draw up and report upon organization, was appointed by the chair : W. C. Root, A. Van Brunt, G. M. D. Knox, W. W. Polk, of Kansas City ; Theodore Carl Link, of St. Louis ; and R. C. McLean, of THE INLAND ARCHITECT, was added to the committee and acted as secretary.

The following communication was read by the secretary :

COATES HOUSE, KANSAS CITY, February 11, 1890.

*James Oliver Hogg, Esq., Secretary Missouri State Association of Architects Midland Hotel :*

DEAR SIR,—Your courteous favor of even date is at hand and many thanks are hereby expressed for the courtesy therein contained. I will present your letter to this association at its forenoon session tomorrow.

Very respectfully, ALLAN V. GARRATT,
*Secretary and Treasurer of the National Electric Light Association.*

The meeting then took a recess until committee could report.

The meeting was called to order at 11:30 to hear report of the Committee on Constitution and By-Laws for the proposed new organization.

The following is the constitution as adopted as a whole, after being read, section by section, discussed and amended :

## CONSTITUTION.

NAME.

SECTION 1. The name of this association shall be the Missouri Chapter of the American Institute of Architects.

OBJECTS.

SEC. 2. The objects of this association shall be to unite all directly or indirectly interested in architecture in efforts to promote the artistic, scientific and practical efficiency of the profession, to encourage the study of kindred arts and to correct unprofessional practices.

MEMBERS.

SEC. 3. This chapter shall consist of fellows, associates and honorary members. Any architect in this state who may have been engaged in the honorable and exclusive practice of his profession for one year shall be eligible to election as a fellow or associate.

Associates of this chapter shall become *ipso facto* members of the chapter upon official notice to the chapter of their election as fellows of the American Institute of Architects.

Architects from other states may be admitted as fellows or associates upon the recommendation of the Executive Committee and upon conformity with these by-laws.

Artists, engineers and others who manifest an interest in the objects of this association shall be eligible to election as honorary members and enjoy the same privileges as fellows and associates, except voting and eligibility to office.

OFFICERS.

SEC. 4. The officers of this chapter shall be a president, a vice-president, a secretary, a treasurer and three trustees, who with the above officers shall constitute the Executive Committee. The president shall be *ex-officio* chairman of the Executive Committee.

DUTIES OF OFFICERS.

SEC. 5. The president, or, in his absence, the vice-president, shall preside at all meetings of the chapter, and in the absence of both of these a presiding officer shall be chosen by those present. The secretary shall take minutes of all proceedings of the chapter, and conduct the correspondence. The treasurer shall collect all funds of the chapter, and disburse the same on the order of the secretary, countersigned by the president; but they shall not involve the chapter in debt. Both the secretary and treasurer shall make a written report of all matters in their charge at each regular meeting. The executive committee shall control the property and general interests of the chapter; shall receive and act upon nominations for membership; receive complaints; give written admonition to any member whose conduct may appear to them to be injurious to the interests of the chapter, or contrary to its by-laws, and if in their opinion the nature of the offense require it, may request him to resign; expel members of the chapter for cause; call all extra meetings; act as a committee of arbitration on all questions submitted to it by members of the chapter; and generally shall control its welfare and interests. They shall keep a record of all their proceedings and report the same at each regular meeting. All appeals from the action of the executive committee, shall be to the board of directors of the American Institute of Architects. Four members of this committee shall constitute a quorum, but a smaller number may adjourn from time to time.

AMENDMENTS.

SEC. 6. This constitution may be amended by a two-thirds vote of the fellows and associates present at any meeting of the chapter, provided that a notice of such proposed change shall have been mailed to each fellow and associate by the secretary thirty days before the date of such meeting.

## BY-LAWS.

ANNUAL MEETING.

ARTICLE I. There shall be a regular meeting of the chapter on the second Tuesday in January each year, and at every such meeting the place of the next regular meeting shall be decided upon before adjournment.

QUORUM.

ART. II. Ten members in good standing shall constitute a quorum, but a smaller number may adjourn from time to time. No member shall be considered in good standing if more than two years in arrears for his dues.

MEMBERSHIP.

ART. III. Fellows and associates shall be practicing architects, whose professional status shall be demonstrated to comply with the constitution, and who shall be admitted or elected in the manner hereinafter set forth.

Candidates for admission shall submit to the executive committee, through the secretary, an application for membership made as follows:

.....18....

To the Board of Directors of the American Institute of Arcbitects:

My full name is .....

My business address is.....

The name of my firm is.....

I have practiced the profession of architecture for..... years.

The accompanying photographs, numbered respectively, 1, 2 and 3, show completed buildings, erected from my plans and under my supervision.

No. 1 is a (here give general description of building).

No. 2, Do. No. 3, Do.

The accompanying drawings are (here enumerate and describe such drawings as the candidate desires to submit). We, fellows of the American Institute of Architects, hereby indorse Mr..... 's application for fellowship. We know him personally; we know his work; we believe him to be worthy of membership.

.....

All applications of, and any further information concerning, candidates, shall be considered confidential by the executive committee, which shall absolutely reject, or accept each application.

Any rejected candidate may make a new application after the expiration of one year.

All resignations shall be made in writing to the executive committee, and addressed to the secretary; but a resignation shall not release the member presenting it from any obligation to the chapter, and all interest in the property of the chapter of members resigning, or otherwise ceasing to be members, shall be vested in the chapter.

All questions of discipline shall be acted upon by the executive committee, which shall decide absolutely and without recourse any questions of unprofessional conduct, non-payment of dues, or action conflicting with the constitution or by-laws, and acting under this by-law the executive committee may pass a vote of censure, or drop a name from the roll, but no such action shall be taken until the accused shall have had an opportunity to be heard in his own defense.

DUES.

ART. IV. All fellows and associates of this chapter shall pay an initiation fee of $5, and annual dues of $2. Honorary members shall pay an initiation fee of $10 and no dues. Charter members shall be exempt from the payment of an initiation fee. All dues shall be payable within two years after each regular meeting, in default of which any member shall be liable to suspension or expulsion by the Executive Committee. The initiation fee shall be remitted to all members of approved local chapters in this state who become members of this chapter, and pay their annual dues.

ELECTION OF OFFICERS.

ART. V. All officers shall be elected at the annual meeting of the chapter by a majority ballot vote of the fellows and associates present. All officers shall be fellows of the American Institute of Architects, and shall be eligible to the same office not to exceed two successive years; but all officers shall hold over until their successors shall be duly elected.

PAPERS AND RECORDS.

ART. VI. All papers and records not considered confidential by the Executive Committee shall be at all times open to the inspection of the fellows and associates of the chapter.

AMENDMENTS TO BY-LAWS.

ART. VII. The by-laws of this chapter may be amended by a two-thirds vote of the fellows and associates present at any annual meeting, notice having been given, as in the case of proposed amendments to the constitution.

RULES OF ORDER.

ART. VIII. The meetings of this chapter shall be conducted according to Roberts' Rules of Order.

The meeting then adjourned and the adjourned session of the Missouri State Association was then called to order by the president.

After the passage of a motion that when the meeting adjourn it adjourn *sine die*, a vote of thanks passed for courtesies received, to Mr. W. F. Stilz, vice-president of the Indianapolis Terra-Cotta Company, and the privileges of the floor given to Mr. T. H. Lescher, an old practicing architect of Topeka, the session took a recess until 2 P.M.

## SECOND DAY—AFTERNOON SESSION.

The Missouri State Association having been called to order a resolution was passed instructing the treasurer and secretary to transfer all money and property belonging to the association to the treasurer and secretary of the Missouri Chapter of the American Institute of Architects, after which the association adjourned *sine die*.

The second session of the Missouri Chapter was called to order by Chairman Fassett, and Mr. E. T. Carr, of Leavenworth, Kansas, was given the privileges of the floor.

The next business in order being the election of officers, on motion of Mr. Carman, a committee of three was appointed to place in nomination officers for the ensuing year.

The chair appointed George Carman and E. C. Chamberlain, of Kansas City, and Theo. C. Link, of St. Louis.

The committee reported as follows:

President, Theo. Carl Link, of St. Louis.

Vice-president, A. Van Brunt, of Kansas City.

Secretary, E. F. Fassett, of Kansas City.

Treasurer, John Beattie, of St. Louis.

Executive Committee, F. B. Hamilton, of Kansas City; G. M. D. Knox, of Kansas City; A. F. Rosenheim, of St. Louis.

W. W. Polk placed another ticket in nomination, but those reported by the committee were elected by ballot. The tellers were H. Probst and E. C. Chamberlain.

On motion, C. E. Illsley, of St. Louis, was elected corresponding secretary.

On motion, it was ordered that the Executive Committee arrange for a competition among draftsmen for a suitable design for a certificate of membership.

On motion, St. Louis was appointed as the next place of meeting.

Mr. McLean suggested that a legislative committee be appointed, and that it be instructed to confer with the Builders' Exchanges of Kansas City, St. Louis and St. Joseph, seeking their coöperation in regard to legislation relating to the lien law. Mr. McLean explained that the National Association of Builders were now considering the question, and the exchanges could give valuable aid in the work.

Mr. Knox moved that a legislative committee of seven be appointed by the chair. That said committee act in conjunction with a similar committee from the Builders' and Traders' Exchange of Kansas City, the Mechanics' Exchange of St. Louis, and the Builders' Exchange of St. Joseph, on the subject of lien law, and that the legislative committee also present the bill for state license for architects and urge its passage.

Chair appointed as a legislative committee: E. L. Fassett, J. Oliver Hogg, S. E. Chamberlain, C. E. Illsley, A. F. Rosenheim, W. C. Root, J. H. McNamara.

Vote of thanks was extended to the managers of Midland Hotel, to the press, to R. C. McLean for his assistance in the work of reorganization, and to the retiring officers, and the convention adjourned to meet at St. Louis on the second Tuesday in January, 1891.

## Our Illustrations.

Chicago Theological Seminary; Patton & Fisher, architects.

Residence of Mr. W. A. Fuller, Chicago; W. W. Clay, architect.

Beloit College Academy, Beloit, Wisconsin; Patton & Fisher, architects, Chicago.

Designs for houses to be erected at Buena Park, Illinois; W. L. B. Jenney, architect, Chicago.

Manufacturing building for Mr. Ashley Pond, Kansas City, Missouri; Irving K. Pond and Allen B. Pond, architects.

Chicago Architectural Sketch Club competition for a village smithy; first place, William B. Mundie; second place, Arthur Heun; third place, O. C. Christian; fourth place, Oscar Enders; fifth place, C. Bryant Schaefer; sixth place, T. O. Fraenkel.

PHOTOGRAVURE PLATES.

*(Issued only to subscribers for the Photogravure edition.)*

Roadside Club House, Cleveland, Ohio; C. F. Schweinfurth, architect.

Semi-detached houses, Oakwood boulevard, Chicago; J. K. Cady, architect.

Residence for Mr. C. C. Thompson, Chicago; Burnham & Root, architects.

Residence of Mr. C. B. McGenniss, Chicago; Burling & Whitehouse, architects.

Entrance to reading room, Auditorium Hotel, Chicago; Adler & Sullivan, architects.

Memorial Building, Yale College, New Haven, Connecticut; Bruce Price, architect, New York.

Auditorium tower vestibule, main entrance to Auditorium and tower, Chicago; Adler & Sullivan, architects.

## New Publications.

ARCHITECTURAL WROUGHT-IRON WORK, ANCIENT AND MODERN: A compilation from various sources of iron work from medieval times down to the present day, by William Winthrop Kent, New York, W. T. Comstock.

In his dedication the author addresses his book "to the younger members of the profession, in the hope that it will prove of interest and assistance to them"; and this is, perhaps, the best comment that could be made on the book, for its function seems to be that of an introduction to more exhaustive works. As such it is much to be commended; for it exhibits sound sense, and discrimination, and will do much toward forming in beginners a taste for good work; something of far more importance than a completer work necessarily does; for it is of far more value to know a good design than to have a source from which to copy bad ones, and palming them off on clients, who, as is their time-honored custom, measure the beauty of a design by its cost in cash. The author remarks that it has been only within a few years that Americans have paid much attention to artistic wrought-iron work, and seems to infer that the sudden acquisition of wealth has caused the improvement in design. This reason might account for the wider use of wrought-iron, but hardly for the improvement in design, since it costs relatively little more to execute a good design than a poor one. If wealth brought with it good taste we should not be forced to see our avenues and boulevards disfigured by monstrosities whose only merit is apparently that nothing has ever been built like them before. The text, consisting of an introduction and a description of the plates, contains pointed comments on some of the methods used in iron manufacture at the present day, the waste of skill in shaping iron into forms characteristically inappropriate, the habit of beating iron into molds to save the expense of skilled labor, the amateurish way in which false hammer marks are put on some recent work to give it the semblance of the crisp, spirited work of former times. Some of the modern work by Messrs. McKim, Mead and White, H. L. Page and H. H. Richardson is of unusual merit and handled according to the true feeling of the material. But a comparison of modern work with the old work is decidedly to the disadvantage of the modern. The binding and typography are good; the plates are fair; but the paper has a disagreeable yellowish tinge which places the mechanical execution at a disadvantage; and we regret the commercial tone given to the book by the advertisements.

EXAMPLES OF AMERICAN DOMESTIC ARCHITECTURE. By John Calvin Stevens and Albert Winslow Cobb, architects. With illustrations. New York, William T. Comstock, 1889. Price $10.00; sent by mail, free of postage, to any part of the world.

The object which the authors had in publishing this book is not wholly free from obscurity. There appear to be several conflicting purposes: to educate public taste, to preach a crusade against extravagance and luxury, and to advertise the authors. The book is addressed nominally to the public rather than to the architect, though much of the preaching is aimed at the architectural practitioner. This heterogeneousness of purpose makes it quite possible to produce a book that is at the same time very good and very bad. And this is just what the authors of "American Domestic Architecture" have accomplished. From the standpoint of mechanical execution the book is excellent; the binding tasty; the paper well chosen both in weight and tone; the printers' work in cuts and letter-press attractive. The head and tail pieces are well sketched and fit easily into their places. The whole make-up is so good that we expect to find that authors who can dress up a book so happily have done something creditable in architectural design. In this we are not disappointed. The average of the represented work of the authors' own design is satisfactorily and unusually high. Some of it deserves more than passing notice. In general, a truly domestic, home-like character has been attained. There is a praiseworthy striving for simplicity, and oftentimes this simplicity is attained with a noteworthy freedom from formality, stiffness and angularity. In instance of the above qualities we may cite plates 21, 26, 27, 32, 34, 38. In such a mass of the authors' work as is here represented it would be strange if all were as good as the above. Of the work illustrated an occasional plate is stiff, uneasy and restless. We shall welcome the day when the average American work is up to the average shown in this book; when there is comparative naturalness and freedom from straining for effect, fitness to location, and no appearance of aping useless fads and fashions.

When we come to the text, by no means such praise can be given. The author of the text, in common with all thoughtful men of today, is burdened by the recognition of inequalities and apparent injustice in our industrial and social order. Observing certain deplorable tendencies in parts of the United States to undemocratic luxury, aristocratic exclusiveness and silly snobbishness, he takes up the cudgel for plain living and high thinking not with the calmness of the man who is determined to get at the bottom facts, and ready, if need be, to make a long fight for amelioration, but rather with the indiscreet haste of an inexpert combatant who feels himself unequal to the task. He ascribes wide results to factors that are themselves results far more than causes, and deals in unscientific generalities and sweeping assertions for which no proof is offered. It is quite likely that something might be made of a more temperate and less rhetorical discussion of the relations of architects to and their real responsibility for extravagance in domestic architecture; but the high sounding phrases of this book, despite the intentions of the authors, are no real contribution to the discussion of that question. When we are invited to condemn the Vanderbilt house (Fig. 6) on the ground of its cost, we are impelled to ask how much more it cost than Brereton Hall, which he praises, and how the style of Brereton Hall is to be adapted to or paralleled in that modest American house which the authors desire. It is a fair question whether, my neighbor being in a starving condition, I am any more justified in spending $10,000 on my house than $15,000, or $15,000 than $40,000, or $40,000 than $100,000. Where shall the line be drawn short of giving all that I have, over and above the plainest of clothes and fare, to feed the poor? The authors set about their crusade against the extravagance of the American people by issuing this tract at $10 a volume.

## Synopsis of Building News.

**Baltimore, Md.**—Building in 1889 has been a little less active than during the past year, having fallen off about twelve per cent. The number of new buildings erected in 1889 was 1,926, as compared with 2,188 in 1888.

One long felt want, that of modern office accommodations, is now being rapidly supplied. The handsome new building of the Farmers' and Merchants' Bank was finished during the past year. The National Bank of Baltimore is just completing its magnificent seven-story building, and the Central Savings Bank is about to commence a like structure upon its old site at the southeast corner of Charles and Lexington streets. The "Law Buildings" at the corner St. Paul and Lexington streets, which have long been an "eyesore" to that locality, have recently been sold and are to be supplanted by a fine modern office building. We also understand that a portion of the old Barnum's Hotel property, recently purchased by the National Trust and Guarantee Company, will be improved for a like purpose.

The apartment house or "flat" is one of the requirements of modern times in all well-appointed cities, and in this we are very deficient. It would seem to offer an attractive field for investment.

**Buffalo, N. Y.**—Architects C. K. Porter & Son have designed the new Municipal Court Building. It is to be 80 feet front by 107 deep, three stories high, heated by steam, fan ventilation, lighted by gas, brownstone front and trimmings, fireproof construction; is now under way; it is to cost $125,000.

Architect W. W. Carlin is building for himself a residence and studio at the corner of Court and Franklin streets, to be of brick and brownstone, four stories, 50 by 83 feet; to cost $35,000. For Mr. J. T. Hurd, a stone and frame residence at Elma, N. Y.; to cost $10,000. An addition to the State Insane Asylum at Buffalo, all of brownstone front, 210 by 50 feet deep, three stories; to cost $200,000.

Architects Green & Wicks are building a residence for Rev. Dr. Mitchell, to be of brick, 40 by 100 feet, to have electric bells, gas lighting, cabinet finish; to cost $25,000.

Architect C. D. Swan is making designs for a brick and frame residence for Marcus Spiegel, Esq.; to cost $18,000. A residence for Mr. Frances Handel, to be built on Linwood avenue, to be of brick and wood; to cost $14,000. A frame dwelling for Mr. Robert Forsyth, to be built on Elmwood avenue; to cost $9,000. Brick and frame dwelling on Main street for C. G. Worthington, Esq.; to cost $14,000; also stable for Mr. Worthington; to cost $2,500. Public school No. 48, to be of brick, steam heating, seating, blackboards, etc.; to cost $42,000. United Presbyterian Church, of brick, nearly finished; to cost $22,000. Brick and frame dwelling for Mr. George Derrick, to be built on Sumner street; to cost $12,000. Public school No. 9, on Bailey avenue, of brick; cost $38,000.

The conditions are out for the competition for the Erie Company Bank Building, which is to cost $750,000; competition is open to Buffalo architects only; designs to be in March 1.

**Chicago, Ill.**—Architect Oliver W. Marble is preparing plans for a four-story block of eight stores and flats, to have a front of 166 feet on Van Buren street, and cost about $80,000; Tiffany pressed brick, terra-cotta and Bedford stone front; wood mantels, bathrooms; iron beams and columns. Also making plans for another block of four-story flats, to be erected on Boston avenue; to cost $75,000; Tiffany pressed brick, terra-cotta and Bedford stone; bathrooms, closets, mantels, etc. Getting out plans for a two-story flat building to be erected on Walnut street, near Francisco; to cost $8,000; pressed brick and stone front; bathrooms, closets, mantels, stained glass. Making plans for remodeling house for H. S. Newton, on Warren avenue; will put in steam heat and modern improvements.

Architect A. L. Schellenger: For Eugen Brown, seven two-story dwellings, corner of Fifty-sixth and Sangamon streets; frame, stone basements, furnaces, mantels, bathrooms, closets, stained glass; cost $25,000; making plans.

Architect W. H. Drake: For A. C. Getter, a two-story residence, to cost $7,000; pressed brick and stone; hot water heating, wood mantels, bathrooms, closets; oak finish; making plans.

Architect Henry Sierks: For Otto Miller, a two-story store and flat building, to cost $10,000; St. Louis pressed brick and Bedford stone; bathrooms, closets, mantels; making plans. For Mr. Preble, a three-story store and flat building, to cost $12,000; St. Louis pressed brick and Bedford stone; working on plans.

Architects Beeuer & Parmeter are working on plans for three brownstone front dwellings, to be erected on Hibbard avenue, near Fifty-first street; bathrooms, mantels, furnaces, stained glass; to cost $20,000.

Architect C. R. Adams: For R. Lundahl, a four-story flat building, to cost $7,000; Mayenberg pressed brick and Portage stone front; making plans. For Thomas Peterson, working on plans for a three-story store and flat building, to cost $6,000; pressed brick and stone front; bathrooms, closets, etc.

Architect C. O. Hansen: For B. Bernson, a three-story flat building, to cost $7,000; St. Louis pressed brick and Connecticut brownstone; bathrooms, closets, mantels, stained glass; making plans.

Architect F. Foehringer: For H. Bohrman, a four-story flat building to cost $15,000; St. Louis pressed brick and Bedford stone; mantels, bathrooms, closets; letting contracts.

Architect F. R. Schock is getting out plans for a three-story building, to cost about $40,000; Bedford stone front, steam heat, electric light, bathrooms, closets, mantels, etc. It will contain stores, dance hall, lodge rooms, etc. For L. J. Maguire, getting plans ready for figuring for a residence, to cost $6,000; frame, stone basement, furnace, mantels, bathrooms, closets, stained glass. For R. A. Hintze, finishing plans for a two-story residence, to cost $6,000; frame, stone foundation; hot water heating, mantels, bathrooms, closets, stained glass.

Architect William Ohlhaber: For Oswald Fulde, a three-story store and flat building, to cost $6,000; Anderson pressed brick, Bedford stone and galvanized iron bay window; furnace, bathroom, closet, mantels, stained glass; letting contracts. For Jacob Maul, a three-story dwelling, to cost $5,000; Anderson pressed brick, terra-cotta and Bedford stone; steam heat, mantels, bathroom, closet; letting contracts. For Mrs. Kaifer, a three-story frame dwelling to be built at Desplaines; making plans. For Mr. Beil, making plans for a two-story dwelling, to be built on Richmond street near Humboldt Park; Anderson pressed brick front; bathroom, closet, etc. For Charles Mueller, a three-story store and flat building, to cost $12,000; Anderson pressed brick and Ohio brownstone; bathrooms, closets, stained glass; making plans. Also preparing plans for a frame church, to be erected at Jefferson; stone foundation; stained glass, pews, furnace, and spire 115 feet high. Also working on plans for a four-story store and flat building, to cost about $20,000, to be erected on Wallace street; Anderson pressed brick, Bedford stone and galvanized iron bay windows; bathrooms, mantels, closets, stained glass.

Architect A. Druiding is preparing plans for a church to cost $20,000, to be built at New London, Wis.; furnace, pews, stained glass, etc. Also making plans for a frame church, to cost $10,000, to be erected at Whiteville, Va.; stone foundation; furnace, pews, stained glass.

Architects Furst & Rudolph: For C. G. Fanning, a two-story dwelling, to cost $6,000. Portage stone front, furnace, mantels, bathroom, closet. Excavations are now being made.

Architect Julius Zittel: For H. Fuerstein, a two-story store and flat building, at 449 Lincoln avenue; frame, bathroom, closet, mantels, etc.; cost $5,000.

Architects Thiel & Lang: For Dr. Moelman, a two-story dwelling, to be built on Hoyne avenue; stained glass, mantels, bathroom, slate roof, stone basement; the owner is taking figures. For Jacob Kerg, a two-story flat building; to cost $5,000; St. Louis pressed brick and stone front, stained glass, bathroom, closet; owner takes figures. For Fritz Spahr, a three-story store and flat building; to cost $7,000; St. Louis pressed brick and Bedford stone; bathrooms, closets, stained glass. For William Griffin, a two-story flat building; to cost $7,600; St. Louis pressed brick, terra-cotta and red Portage stone front; furnace, mantels, stained

glass. For Bernard Klein, making plans for a frame dwelling, to be built on Ashland avenue near Addison. For Alfred Edland, a two-story flat building; to cost $5,000, at 154 Wilmot avenue; St. Louis pressed brick and stone; bathroom, stained glass; owner will take figures.

Architect Fred Ahlschlager: For Edward Bloom, a block of three two-story and basement dwellings; to cost $15,000, corner of Honore and Sixty-seventh streets; St. Louis pressed brick and buff Bedford stone; furnaces, mantels, bathrooms, closets, stained glass; letting contracts. For Mrs. E. Newman, a two-story, basement and attic residence; to cost $12,000, on Stewart avenue near Sixty-third street; Bedford stone front; steam heat, hardwood finish, bathrooms, closets, mantels; making plans. For William Bromstdt, a three-story store and flat building; to cost $20,000: St. Louis pressed brick and Bedford stone; bathrooms, closets, mantels, stained and plate glass; making plans.

Architect Swen Linderoth is making plans for a church, to cost $20,000, to be erected at Princeton, Ill., for the Swedish Lutherans; furnace, pews, stained glass. Making plans for the Elim Baptist Church, to be erected at Minneapolis, Minn.; brick and stone; furnace, pews, stained glass. Also a two-story parsonage; cost $17,000. For the Swedish Baptist Church, to be erected at Denver, Colo.; brick and stone; furnace, pews, stained glass; cost $12,000; preparing plans. For the Swedish Baptist Church, to be erected at Stambaugh, Mich.; frame, stone basement; furnace, pews, stained glass; cost $10,000; working on plans. Preparing plans for the Swedish Baptist Church, to be erected at Ironwood, Mich.; frame, stone basement; pews, stained glass. Also finishing plans for the Meriden (Conn.) Church, to cost $8,000; frame, stone basement. Rev. A. Rohnstrom, pastor. Making plans for a church to be built in Sweden, at Domnarfvet and Borlange; stone and brick with stucco work outside, to cost 50,000 crowns, Swedish money.

Architects Edbrooke & Burnham: For Robert W. George, a three-story store and flat building, to cost $20,000; stone front.

Architect William Thomas is making plans for a two-story stone-front residence, to cost $15,000, for F. I. Wilson; steam heat, mantels, etc. For George H. Wessling, a two-story frame residence, to cost $7,000, at Edgecomb Court; furnace, mantels, bathrooms, stained glass, etc. Also making plans for a four-story warehouse, to cost $25,000, to be built on Canal street; brick, iron and Bedford stone front; steam heat, elevator, etc.

Architect Julius H. Huber: For Hempstead Washburne, a three-story residence, to cost $25,000; hot-water heating, oak and mahogany finish, paneled ceilings, marble floors and vestibules, etc. Preparing plans for Columbia Park Company, Willow Springs, Ill., picnic grounds, dance hall, dining room, kitchen, music stand, bowling alley, railway station, etc.

Architect Perley Hale: For John K. Brower, a three-story store and flat building, to cost $30,000; Bedford stone front, bathrooms, closets, mantels, etc.; the owner takes figures.

Architect C. A. Weary: For Mr. Clark, three two-story dwellings, to cost $13,000; Collinsville pressed brick and Bayfield brownstone front; making plans For O. M. Ellison, a two-story flat building; Collinsville pressed brick and Bedford stone.

Architects Ostling Brothers: For Austin O'Malley, a three-story flat building; cost $10,000; Bedford stone front, furnace or steam heat, bathrooms, etc.; making plans. Also making plans for a three-story store and flat building, to be built on Division street, to cost $16,000. Making plans also for a three-story flat building, to be built on Sedgwick street; bathrooms, mantels, closets, stained glass.

Architect George Grussing: For S. W. Roth, eight two-story flat buildings, to cost $20,000; Tiffany pressed brick and Bedford stone. For Mr. Britton, a three-story store and flat building, to cost $12,000; Tiffany pressed brick and Carbondale brownstone; making plans. Also preparing plans for two stores and sixteen flats, to cost $30,000; Tiffany pressed brick, terra-cotta and Bedford stone, bathrooms, closets, mantels, elevator.

Architect Robert Rae: For J. B. Ingraham, of Englewood, making plans for fourteen dwellings, to cost $70,000, to be erected at Auburn Park; cut-stone fronts, furnaces, mantels, stained glass, etc.

**Cincinnati, Ohio.**—Reported by Lawrence Mendenhall:

We are having now our first touch of winter, but of a mildness that is astonishing, not to say anything of its extreme unhealthfulness. La grippe has tweaked our noses rather mercilessly, although it gave us a kind of free "blow out" as it were. Architects and draftsmen, carpenters and brickmasons, doctors and ministers, were all treated alike, while even odd-fellows and knights were given a grip(pe) not down in their manuals. All we can say is "speed the parting guest."

When Secretary Sayward made his western trip and visit to the various Builders' Exchanges, he paid us one, and stirred up our semi-lachrymose body in a beneficial manner, we hope.

Our exchange will be reorganized into a stock concern, with corporate and non-corporate members. The taking of stock and government is confined to the corporate members who must be master mechanics in their respective trades, thereby excluding all material men. While this may seem a little exclusive, yet as the bosses are the ones directly interested in building it is proper. As to its benefits to the association, I am doubtful, for it is a question in my mind whether material men will care to quietly pay assessments without representation. The most laudable feature of the reorganization is that of founding a manual training school, a feature meriting the support of the entire community.

A round of the architects offices shows only a moderate amount of work being done at present. One of the season's disturbing elements will be the question of the eight-hour law, and at present all that contractors can do is to await developments.

Architect J. W. McLaughlin is busy preparing the drawings for the new Y. M. C. A. building, and the seven-story stone store and office building for Joseph T. Carew, a gentleman who is worthy of emulation for genuine enterprise and push. His building will cost a good round sum, possibly $150,000.

Architects Hannaford & Sons are busy, and report among other structures the following: For Charles A. Miller, Esq., a stone residence, fourteen rooms, hardwood finish, slate roof, plumbing, stained glass, hot water heating, dumb waiters, etc. For Charles B. Russell, Esq., a similar residence in every respect, containing sixteen rooms. For W. H. Roberts, saddler, Main street, also a house of a similar plan.

Architect S. E. DesJardins is drawing, among other plans, one for a house for Mrs. Alfred White, Park street near Plum, to be of stone and frame and have stained glass, furnace, hardwood finish, slate work, electric bells, plumbing, etc.; cost $6,600.

Architect Geo. W. Rapp has opened an office in Johnston Building. His rooms are well lighted and large.

Architect Wm. M. Aiken is busy on plans for the Big Four R. R. freight depot.

Architect S. W. Rogers: For a two and a half story brick house, for Mrs. P. W. Francis, of Harrison, Ohio, to have stained glass, furnace, hardwood finish, wood mantels, tin roof, etc.; cost $6,000.

Architect W. W. Franklin is well employed. For Chas. L. Mills, Esq., a pressed brick residence, with furnace, hardwood finish, wood mantels, stained glass, blinds, etc.; cost $4,500.

For Jos. C. Butler, estate office, Gano & Main, two double houses of pressed brick, pine finish, wood mantels, furnace, stained glass, laundry, plumbing, etc.; cost $18,000.

For the same party, a block of five houses of similar finish, etc.; cost $16,000.

Architect C. W. Drach has the plans prepared for a house for Mr. A. B. Heilemann, Clifton, Ohio (city) to be of frame and shingle, and have yellow pine finish, wood mantels, stained glass, blinds, plumbing, hot water heating, laundry fixtures; cost $5,000.

Architect Theo. A. Richter has drawn plans for Messrs. Brown & Potter (with J. M. Potter, Fifth near Race) for two houses of brick, slate mantels, pine finish, plumbing, slate roof, etc.; cost $8,000.

Lucien F. Plympton has prepared plans for a residence for J. G. Dinkelbihler, city, to be pressed brick, pine finish, wood mantel, slate roof, furnaces, plumbing, etc.; cost $9,500.

Architect J. B. Steinkamp has prepared plans for Mr. Thos. Curry, Builders' Exchange, for a brick house, pine finish, wood mantels, plumbing, tin roof; cost $3,500.

Architect Emil F. Baude has prepared plans for three houses for W. H. Pugh, Esq., city, to be of brick, pine finish, wood mantels, blinds, laundries, plumbing, etc.; cost $12,000.

**Denver, Colo.**—Reported by Thomas A. Green: Architect Robert S. Roeschlaub reports: For E. B. Light, terrace of seven three-story houses, stone, brick and terra-cotta, plate glass, all modern appliances; cost $40,000. For the Bell estate, terrace of seven three-story houses, pressed brick, terra-cotta and stone; cost $60,000. For Benn Brewer, three house terrace, three stories; cost $15,000. For Thurlow & Hutton, Pueblo, Colo., five-story stone, brick and terra-cotta business building, 120 by 140 feet; cost $150,000.

Architects Balcomb & Rice report: For Donald Fletcher, three-story block; cost $8,000. For W. P. Hastings, terrace of eight houses; cost $12,000. For L. Levy & Co., stores and flats, 75 by 125 feet; cost $22,500. For Smith & Ashton, terrace, 60 by 125 feet, seven houses; cost $20,000. For Mrs. M. A. A. White, double house; cost $9,000. For Albert Lewin, double house; cost $7,000. For H. C. Lowrie, double house; cost $13,500. For M. Hattenback, stores and flats, 50 by 125 feet; cost $12,000. For S. S. Kennedy, pressed brick dwelling; cost $20,000. For J. McCandles, pressed brick dwelling; cost $17,000. For John S. Flower, terrace, 75 by 140 feet; cost $45,000. For Flower & Patterson, pressed brick dwelling; cost $12,000.

Architect Fred A. Hall reports: For J. R. De Remer, stores and flats, 50 by 125 feet, two stories, brick; cost $12,500. For Aspen, Colo, city jail, two stories, brick; cost $12,000. For First Presbyterian Church, Aspen, Colo., red sandstone church building; cost $18,000. For Denver Tramway Company, electric driving station, brick; cost $5,000. For Denver Tramway Company, electric driving station, brick, 50 by 155 feet; cost $7,000. For Eaton Congregational Church, Eaton, Colo., brick church building, 30 by 56 feet; cost $5,000.

Architects Baerresen Bros. report: For R. H. McMann, remodeling residence; cost $10,000. For N. A. Hixon, three-story and basement apartments, stone and pressed brick; cost $15,000. For same, two-story and basement and terrace, four houses; cost $12,000. For J. Snively, hotel, three stories and basement; cost $10,000. For Sam Baret & Co., terrace, two stories; cost $12,000. For Mrs. Sara E. Reed, terrace, six houses, two stories; cost $8,000. For W. E. Bradbury, six one-and-a-half story cottages; cost $18,000. For W. E. Marryatt, two-story residence; cost $5,000. For Sam Barets & Co., two-story business and apartment building; cost $18,000. For P. J. Parsons, residence; cost $6,000. For W. A. Johnson, residence; cost $7,000. For N. K. Huston, business block, cost $12,000. For L. A. Curtice, apartment building; cost $12,000. For W. T. Boyd, two cottages; cost $7,000. For W. C. Marryatt, residence; cost $14,000. For Baerresen Bros., three residences; cost $9,000. For W. M. Clayton, remodeling residence, cost $7,000. For Sage & Ross, N. J. Cloud and others, several cottages.

Architects Kidder & Humphreys: For North Denver Methodist Episcopal Church, stone church building; cost $15,000.

Architects F. E. Edbrooke & Co.: For H. C. Brown, hotel, 250 by 300 feet, ten stories, granite, sandstone and pressed brick, marble wainscoting, tile flooring, four passenger and two freight elevators; estimated cost $1,000,000. For C. D. McPhee, business building, six stories, red sandstone, 100 by 125 feet; cost $175,000.

Architects F. E. Edbrooke & Co.: For St. Mary's Academy, a three-story and basement brick and stone academy building; to cost $175,000. For the People's National Bank, a nine-story stone front office and bank building; to cost $200,000. For the First Presbyterian Church Society of Denver, a stone church building; to cost $120,000.

Architects Lang & Pugh: For T. W. Bartels, a two-story brick residence; to cost $7,000. For South Denver Real Estate Company, a store and town hall building, brick and stone; to cost $10,000. For Ralph Vorhees, two-story Lava stone dwelling; to cost $25,000. For G. W. Tinerman, three-story Golden pressed brick apartment house, 50 by 160 feet; to cost $10,000.

Architect Henry Dozier: For A. H. Weber, a two-story brick residence, plate glass and furnace; to cost $7,000. For F. L. Sigel, a terrace of five houses, white sandstone fronts; to cost $22,000. For A. Fleck, one-story building of eight stores; cost $8,000.

Architect A. Cazin: For James Lalor, a brick terrace; to cost $6,000.

**Pittsburgh, Pa.**—Architect James T. Steen has prepared plans for a four-story store and office block, brick, with tin roof, all modern improvements; cost $12,000.

**Pueblo, Colo.**—Architect G. F. Roe: For the Pueblo Loan, Land & Investment Company, five two-story residences, 28 by 42 feet; cost $15,000. For the Centennial School Building Company, additions and repairs, two wings, 48 by 80 feet, pressed brick with stone trimmings, furnace heated; estimated cost $15,000. Fountain School Building, two-story and basement, size 33 by 70 feet, brick with furnace heat; cost $15,000. For Joe Pochon, eight-story residence, brick with stone trimmings, size 32 by 48 feet; cost $3,500. Also city hall at Bessemer, two-story brick and stone building, 50 by 70 feet; cost $16,000. For Strong Bros. & Deems, two one-story brick houses, 26 by 36 feet; cost $7,500.

Architect T. J. Welsh: For Mrs. Mary E. Von Schroeder, one-and-a-half-story high, brick warehouse; cost $25,000; contractor, Thomas H. Day.

Architects Aston & Stone have prepared plans for a new armory building for the Second Artillery Regiment, National Guard of California; it is to be two stories high, 137 by 96 feet in size, pressed brick and sandstone; cost $25,000.

**Seattle, Wash.**—Architects Parkinson & Evers are preparing plans for an $8,000 Presbyterian church. For Senator W. C. Squire, a six-story block, 240 by 120 feet; granite with terra-cotta trimmings.

**San Francisco, Cal.**—Architects Pissis & Moore: For Mr. Anzerais, of San Jose, five-story stone, brick and terra-cotta and iron building, 48 by 75 feet; cost $70,000. For Mrs. A. M. Parrott, a four-story brick wholesale business house, brick and stone; cost $80,000; contractors, the San Francisco Contracting Company.

Architects Saver, Mullany & Laver are preparing plans for Mr. A. P. Hotaling, for a six-story building with a frontage of 187 feet; the building is to be absolutely fireproof, brick with stone trimmings and iron beams.

Architect J. H. Littlefield is preparing plans for a large business block and first-class hotel for Messrs. Doe & Co., to be erected in the spring; the building will be of brick, stone and iron, and six stories high, two elevators and all modern improvements.

**Sioux City, Iowa.**—Architect Brown has prepared plans for the M. E. University. The building is to be of granite and six stories high.

Architect Soft is preparing plans for the Boston Investment Company, for two blocks, granite and brick, to be erected this year.

As soon as the weather permits work will be commenced on the city library building, to be of brownstone; estimated cost $100,000.

**Sioux Falls, S. Dak.**—A packing house plant will be put in at this place, at a cost of $800,000. Contracts will be let this month.

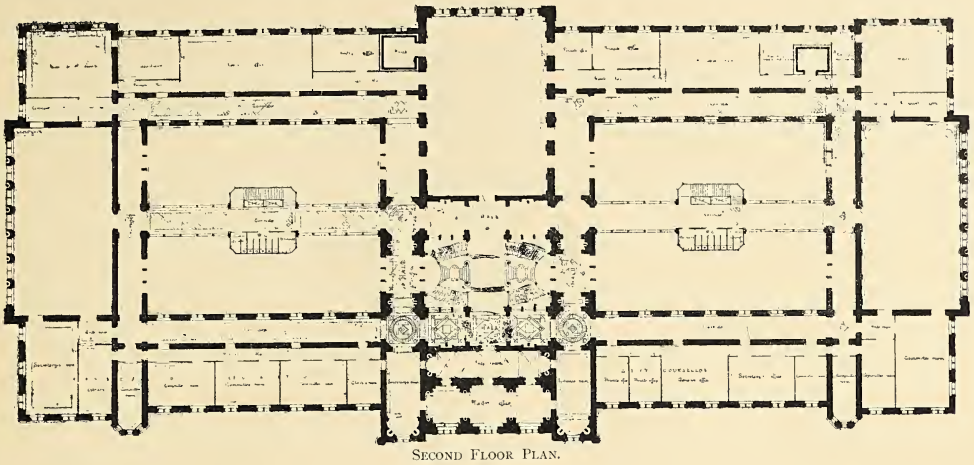
**St. Louis, Mo.**—Architects Shepley, Rutan & Coolidge, of Boston: For Mrs. John O. Shepley, a brick dwelling, size 30 by 67; stone trimmings; cost about $15,000.

Architects names not reported. For the Union Depot Railway Company, a one-story brick power house; cost $13,000; contractors Ittner & Spore. For Mr. N. J. Trunt, a two-story brick dwelling; cost $8,000; contractors L & B. Peoples Company. For Meyer, Baunerman & Co., a seven-story brick store; cost $22,000. For James A. Duffy, a two-story brick store and flats; cost $10,000; contractors J. B. Labarge & Co. For Mr. Theodore Albes, a two-story brick store and dwelling; cost $14,400. For W. H. Thompson, a seven-story brick store; cost $60,000; contractor J. H. Bright.

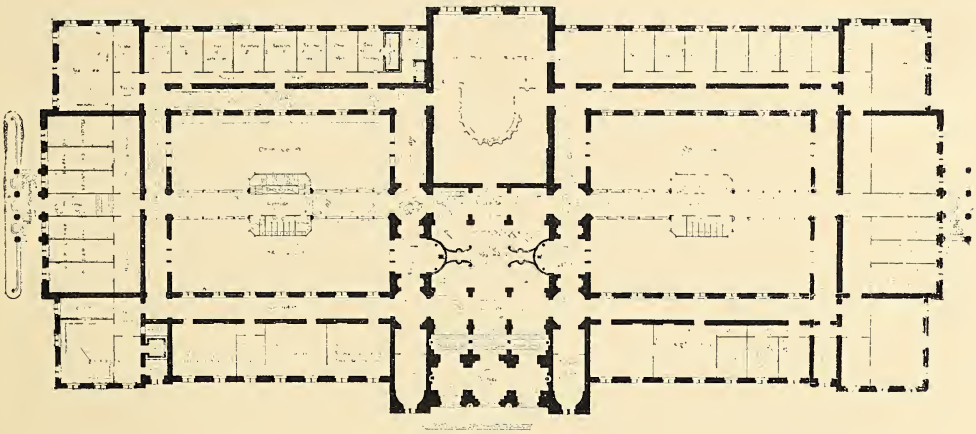
**Tacoma, Wash.**—Plans have not been accepted for the $250,000 Chamber of Commerce building, and new ones will be received until the 15th of this month.

Architects Farrell & Darmer have prepared plans for Messrs. Cogswell & Co., for a business block; cost $6,000.

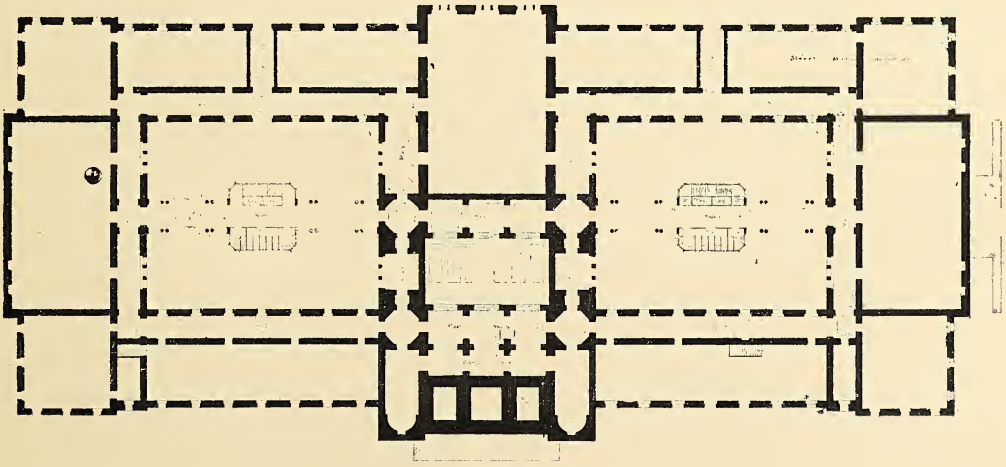
**Toronto, Ont.**—The homeopathic dispensary on Richmond street west, is to be enlarged and converted into a hospital. Wycliffe College buildings have been purchased for hospital purposes; plans are being prepared for alterations and additions necessary to fit them for the uses to which they are hereafter to be put. The Hughes Building, corner of Yonge and Melinda streets, is to have an additional story and alterations necessary to fit it for the accommodation of the *Globe* newspaper. It is proposed to erect a bridge to connect the high land at the northerly limit of Crawford street with New College street; it has not been decided whether it shall be constructed of iron or wood.



Second Floor Plan.



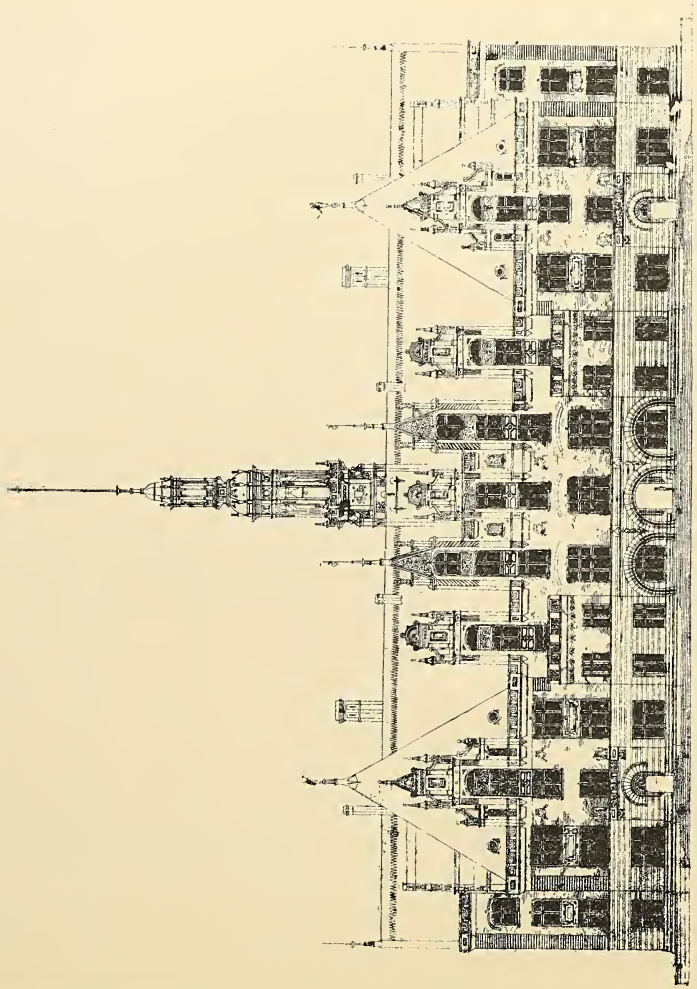
First Floor Plan.



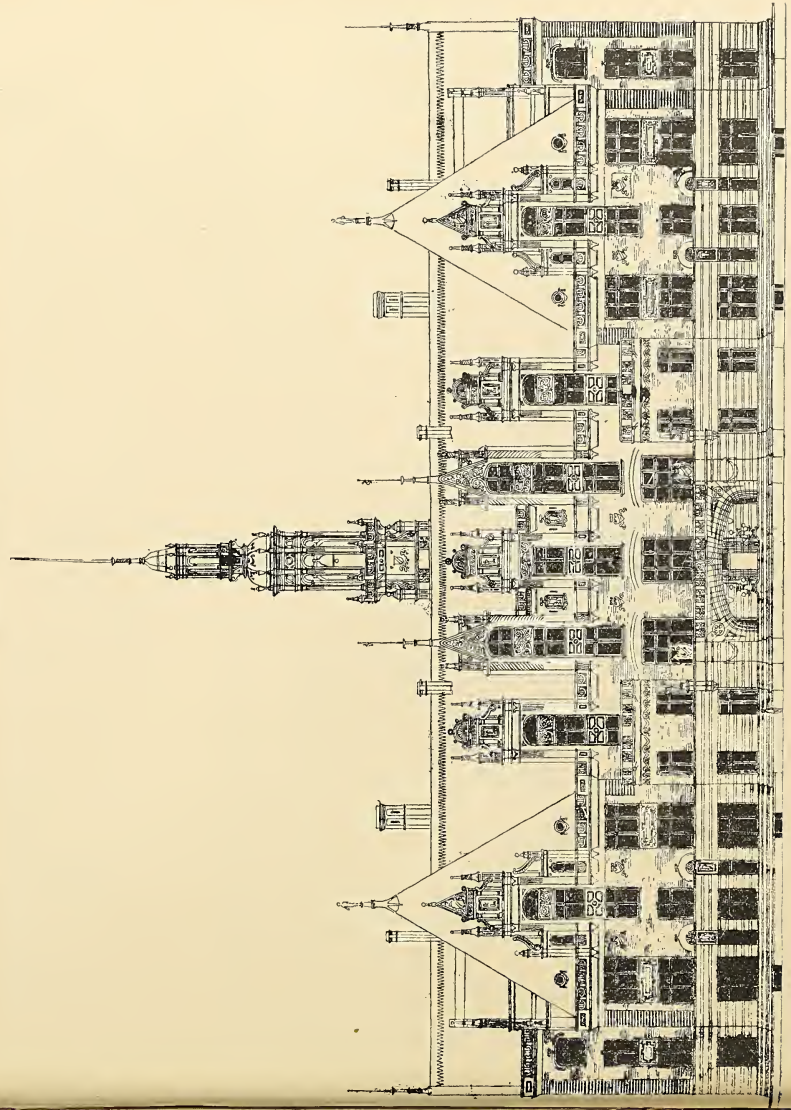
Basement Plan.

FLOOR PLANS, SECOND PRIZE DESIGN.

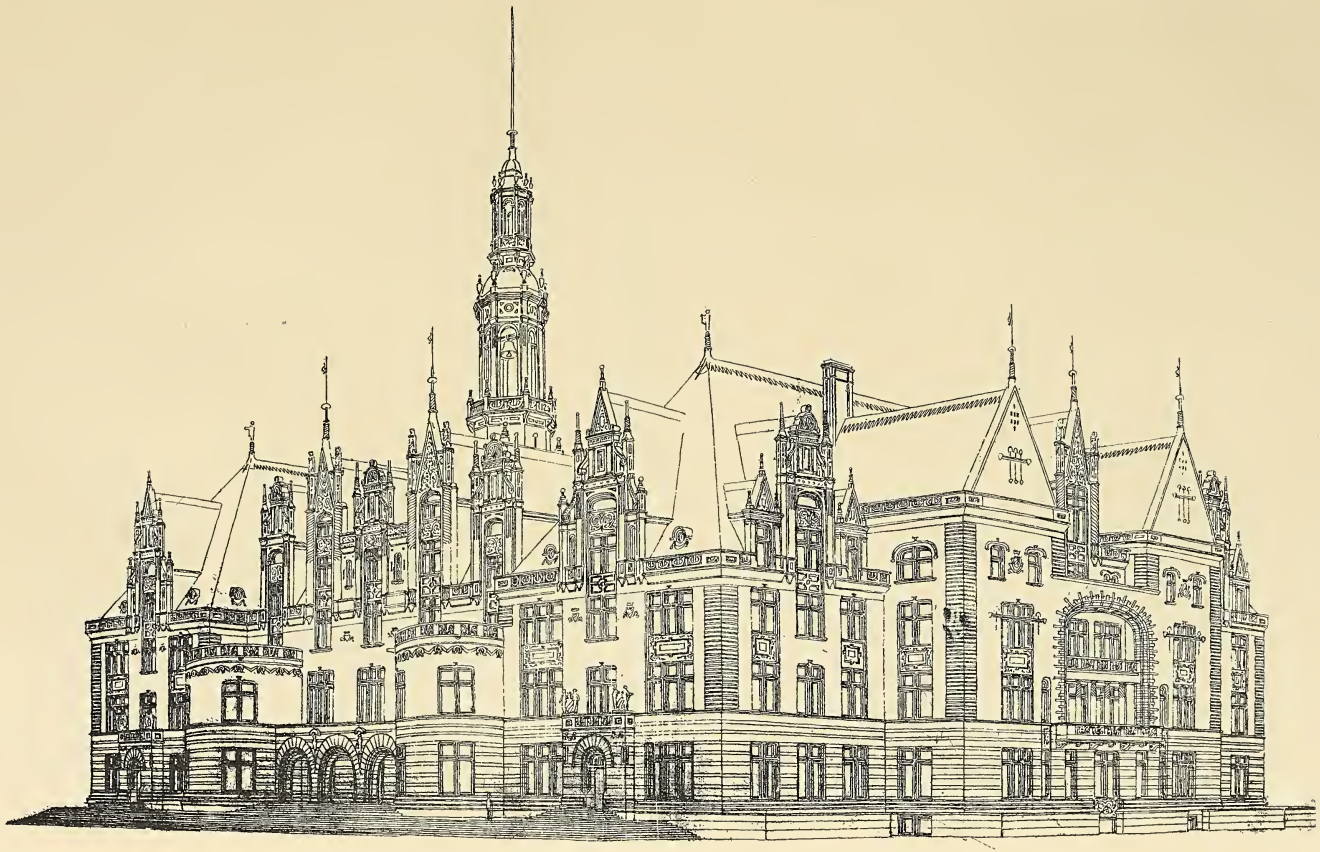
Sidel and Guissart and Ginder, Architects.



FRONT ELEVATION.



REAR ELEVATION.

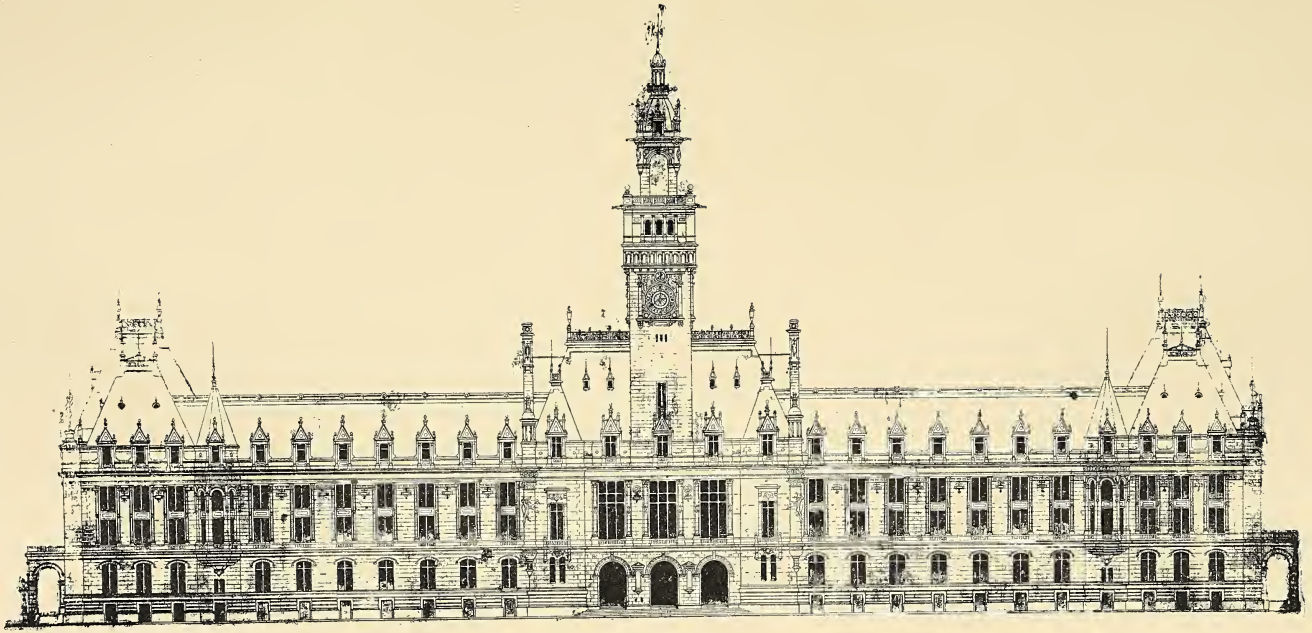


"ST. LOUIS, 1892." ACCEPTED DESIGN FOR CITY HALL, ST. LOUIS, MISSOURI.

ECCLE & MANN, ARCHITECTS, ST. JOSEPH, MISSOURI.

AWARDED FIRST PRIZE BY THE CITY HALL COMMISSION. GIVEN FIFTH PLACE IN PROFESSOR WARE'S REPORT.

NOTE.—The remaining four premiated designs and plans will be illustrated and a full description of and Professor W. R. Ware's report upon the competition for the St. Louis City Hall will be published in THE INLAND ARCHITECT for March.

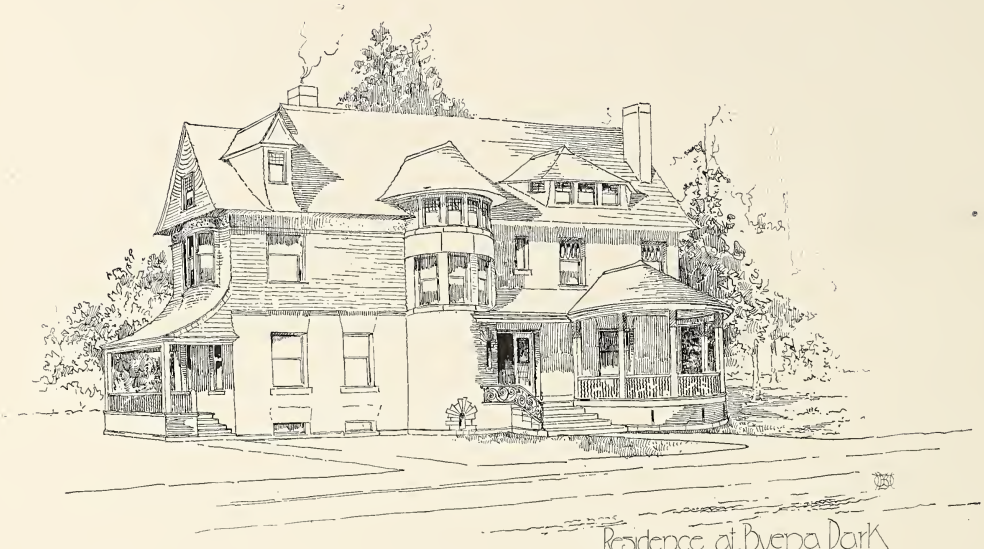


Front Elevation.

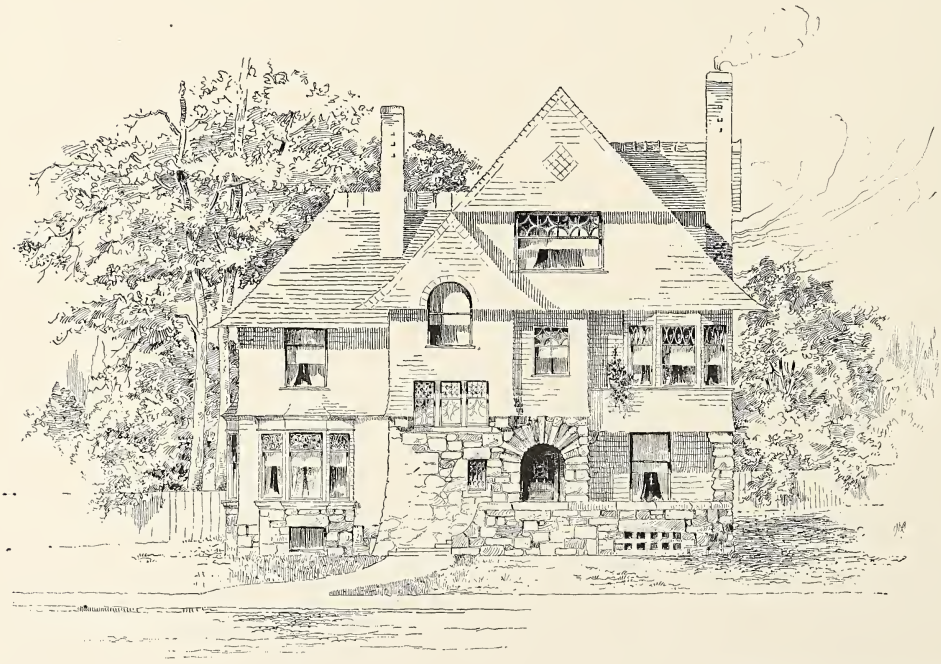
"PRO PATRIA." COMPETITIVE DESIGN FOR CITY HALL, ST. LOUIS, MISSOURI.

Sidel and Guissart and Ginder, Architects, Birmingham, Alabama.

Awarded Second Prize by City Hall Commission. Given First Place in Professor Ware's Report.

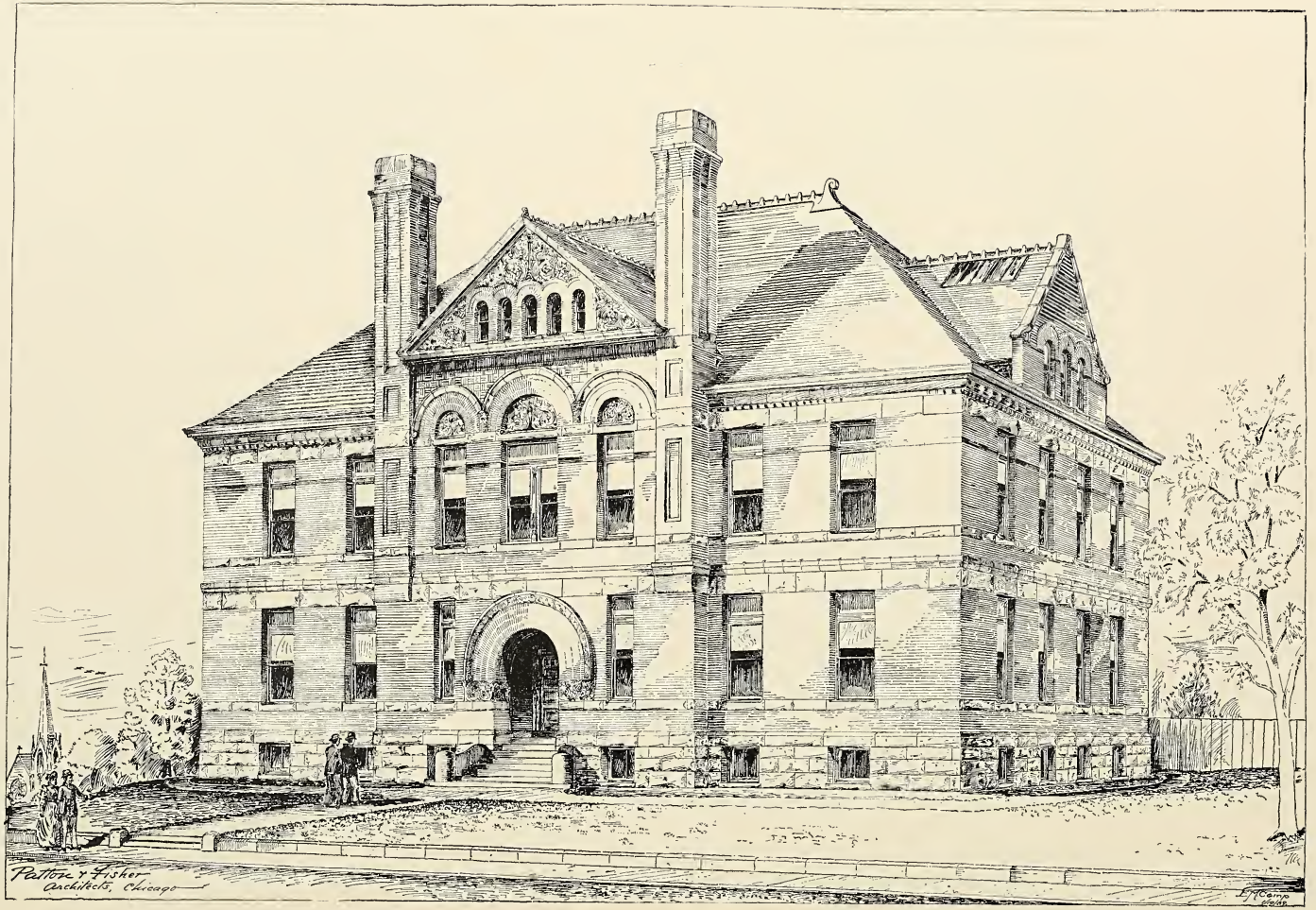


Residence at Buena Park
for Mr. Jos M. Rogers



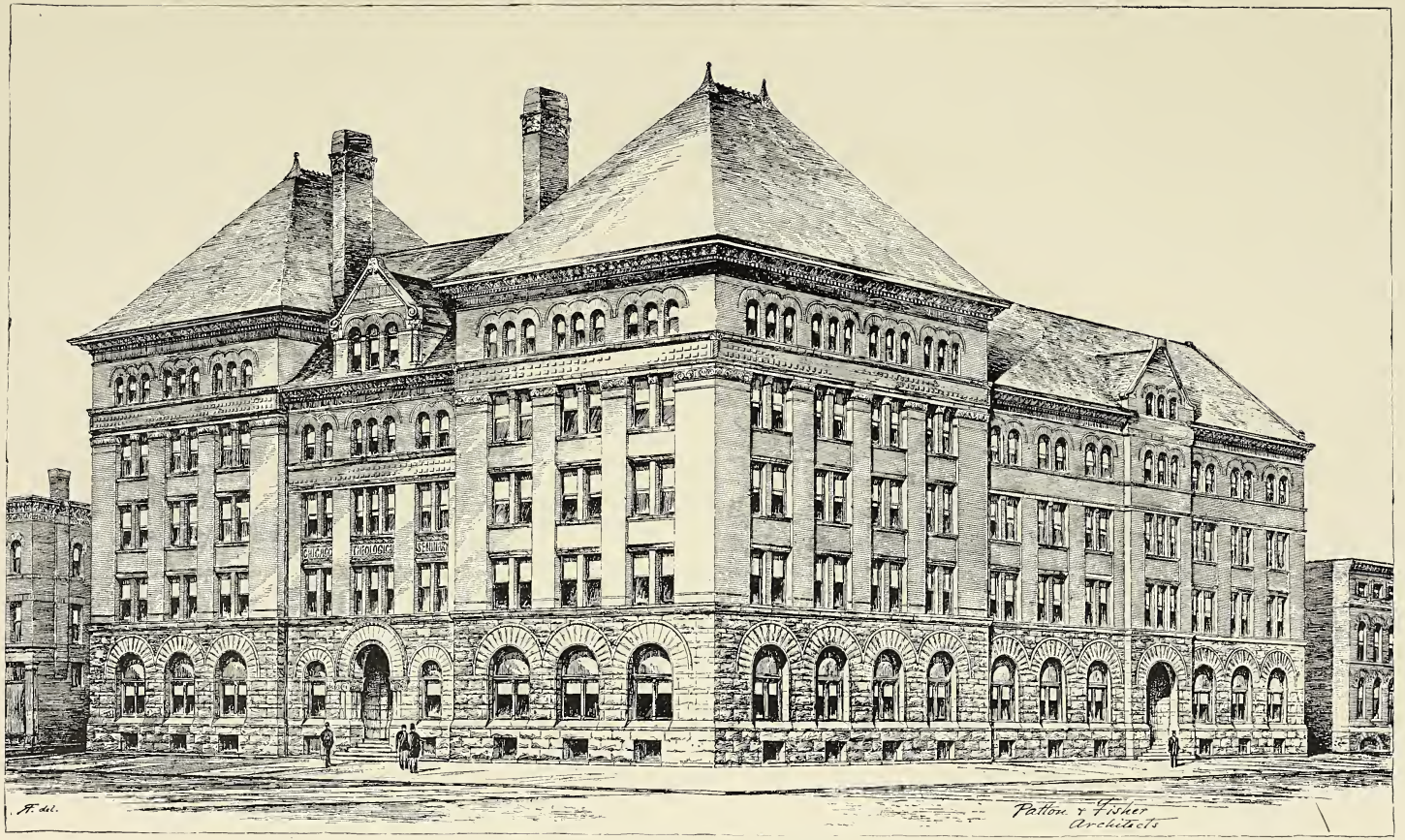
DESIGNS FOR HOUSES TO BE E

W. L. B. JENNEY, A




BELOIT COLLEGE ACADEMY, BELOIT, WIS.

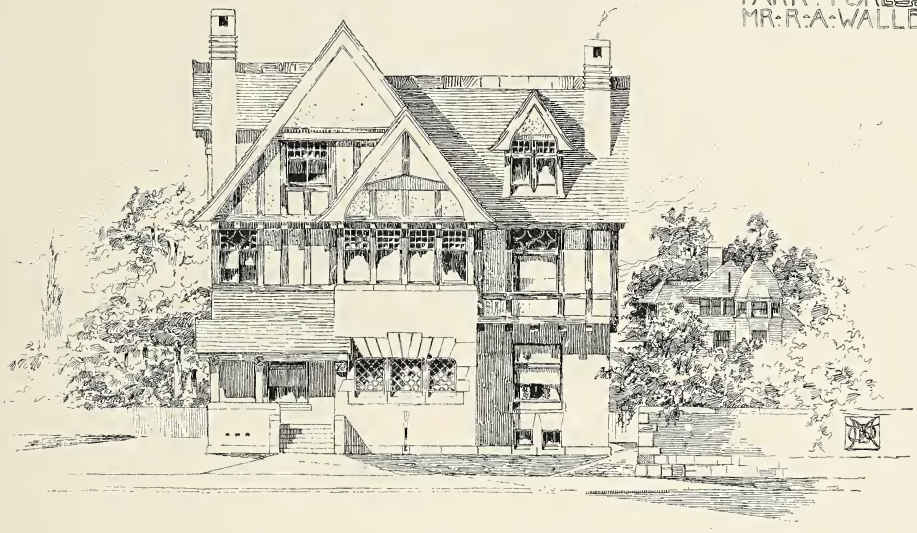
PATTON & FISHER, ARCHITECTS, CHICAGO.

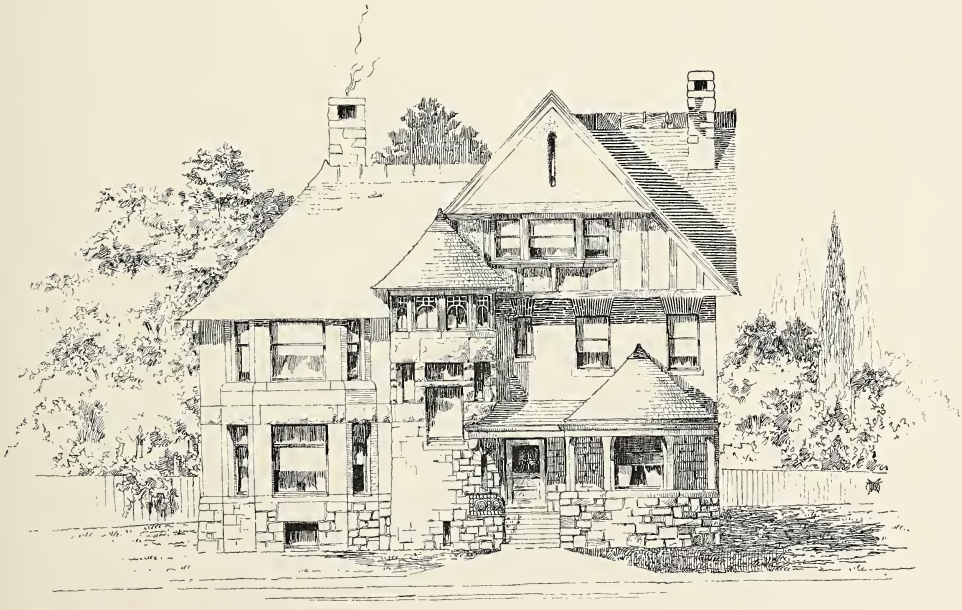



CHICAGO THEOLOGICAL SEMINARY.

PATTON & FISHER, ARCHITECTS, CHICAGO.

SKETCH OF PROPOSED RESIDENCE AT BUENA PARK · FOR MR·R·A·WALLER





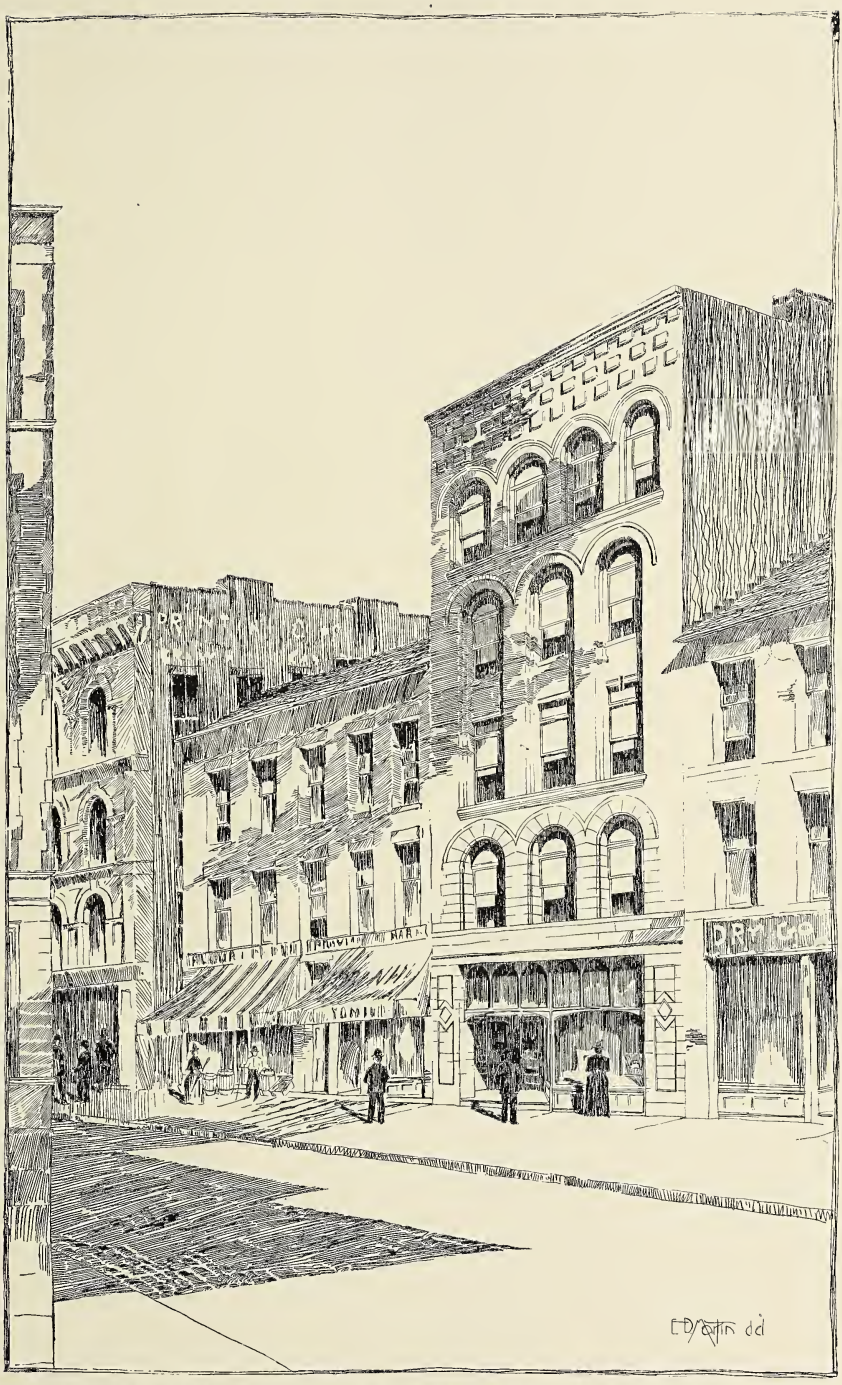
TED AT BUENA PARK, ILL.

CT, CHICAGO.




RESIDENCE OF W. A. FULLER, CHICAGO.

W. W. CLAY, ARCHITECT.

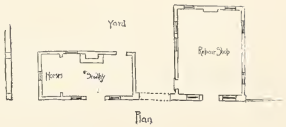


MANUFACTURING BUILDING FOR ASHLEY POND, KANSAS CITY, MO.

IRVING K. POND AND ALLEN B. POND, ARCHITECTS, CHICAGO.

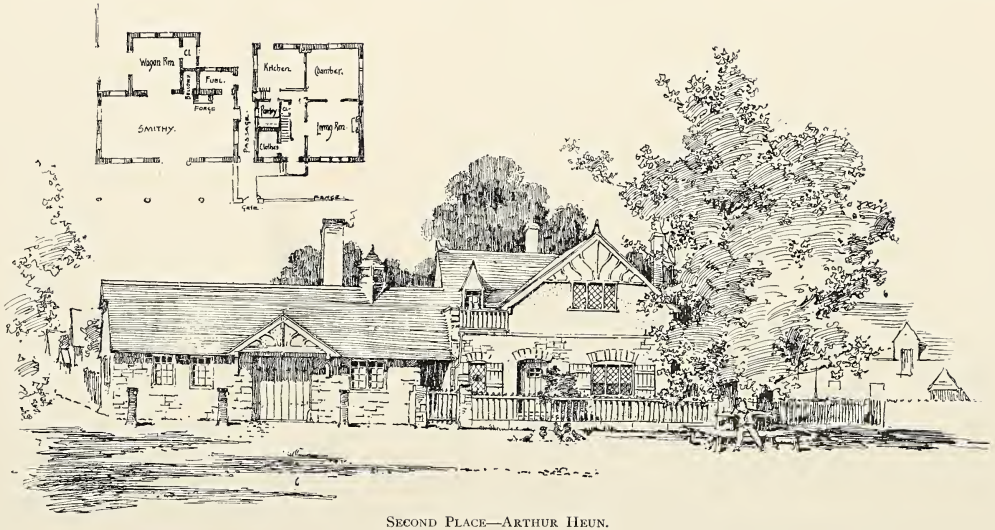


FIFTH PLACE—C. BRYANT SCHAEFER.



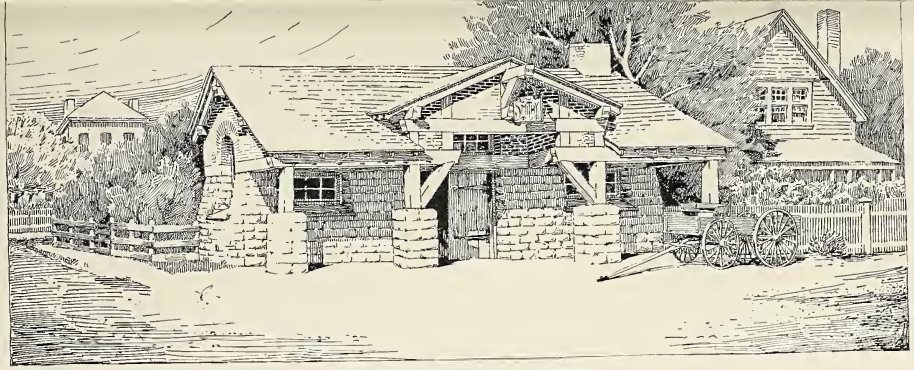



SIXTH PLACE—T. O. FRAENKEL.




SECOND PLACE—ARTHUR HEUN.

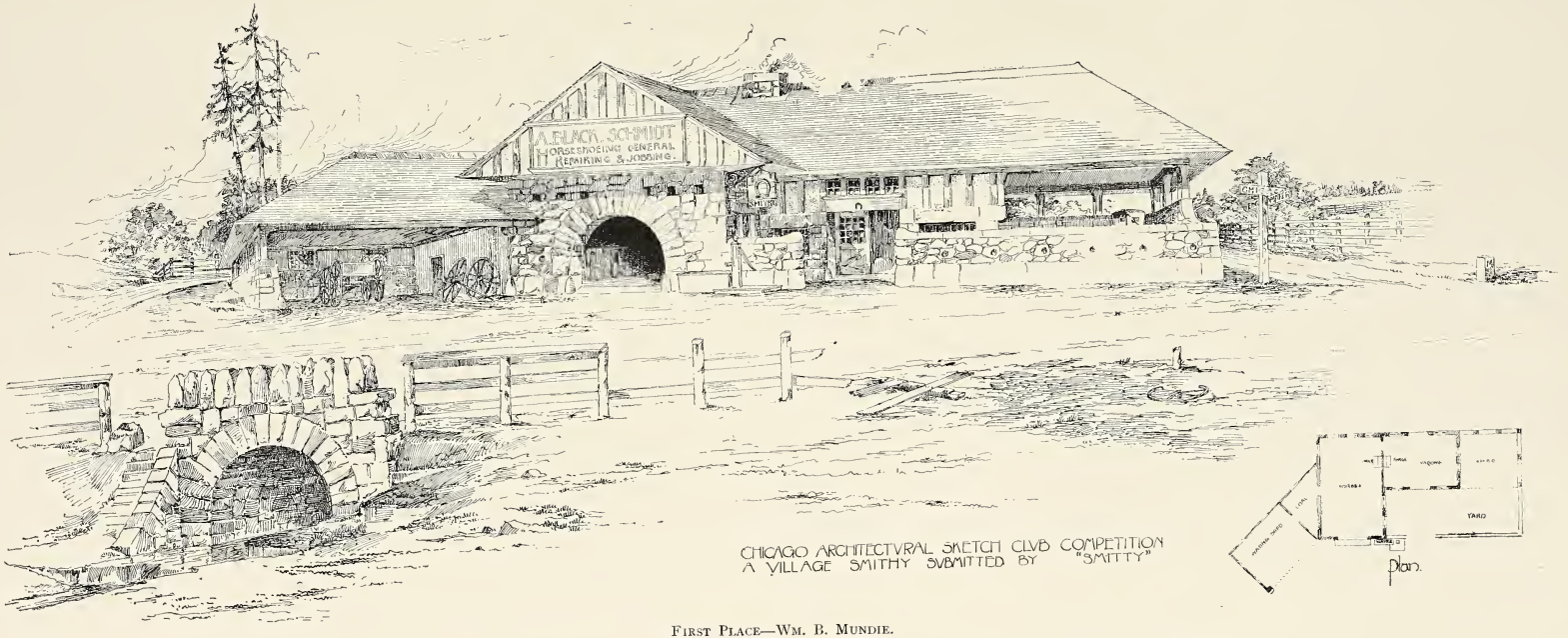




Third Place—O. C. Christian.



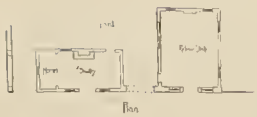
Fourth Place—Oscar Enders.




First Place—Wm. B. Mundie.

## CHICAGO ARCHITECTURAL SKETCH CLUB COMPETITION FOR A VILLAGE SMITHY.

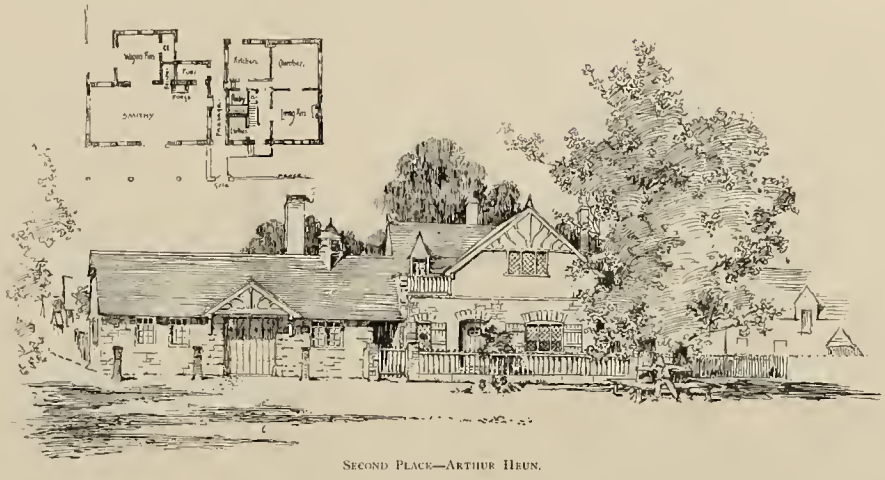




Fifth Place—C. Bryant Schaefer.



Sixth Place—T. O. Fraenkel.




Second Place—Arthur Heun.





Third Place—O. C. Christian.

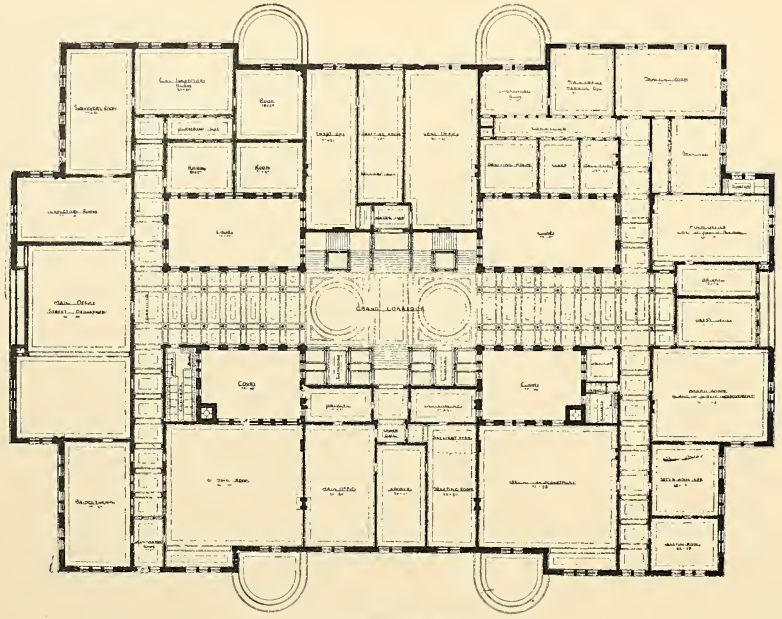


Fourth Place—Oscar Enders.

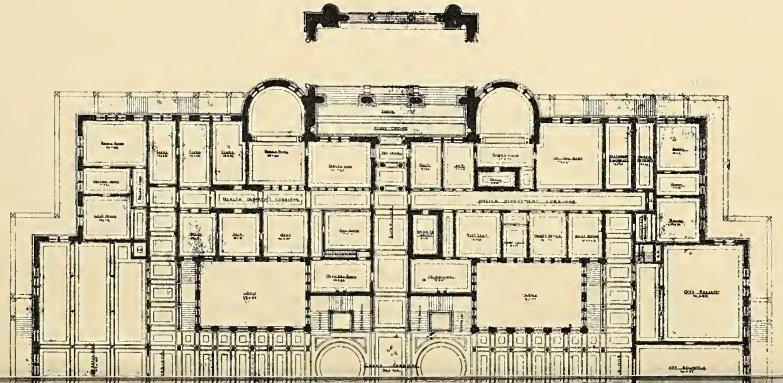


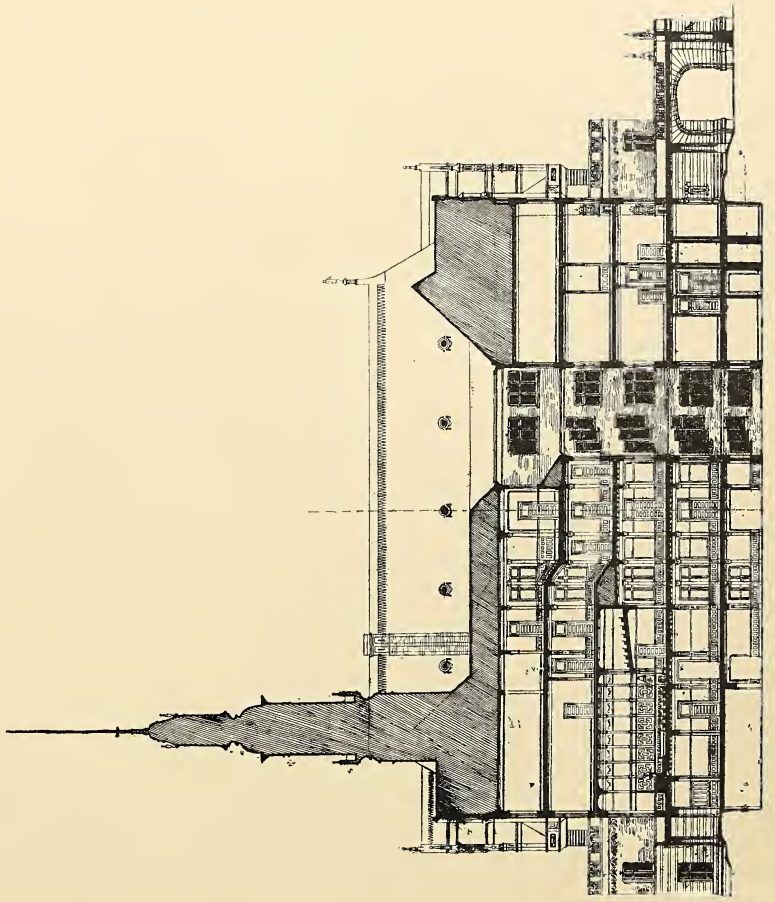

First Place—Wm. B. Mundie.

CHICAGO ARCHITECTURAL SKETCH CLUB COMPETITION FOR A VILLAGE SMITHY.

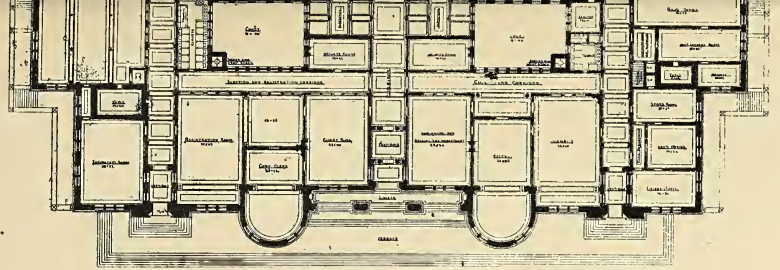


THIRD FLOOR PLAN.

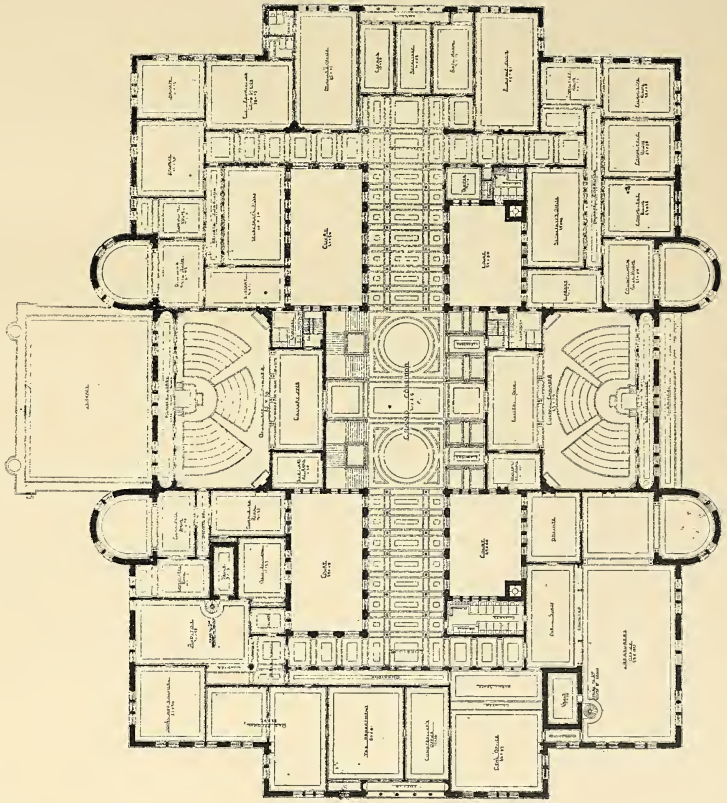




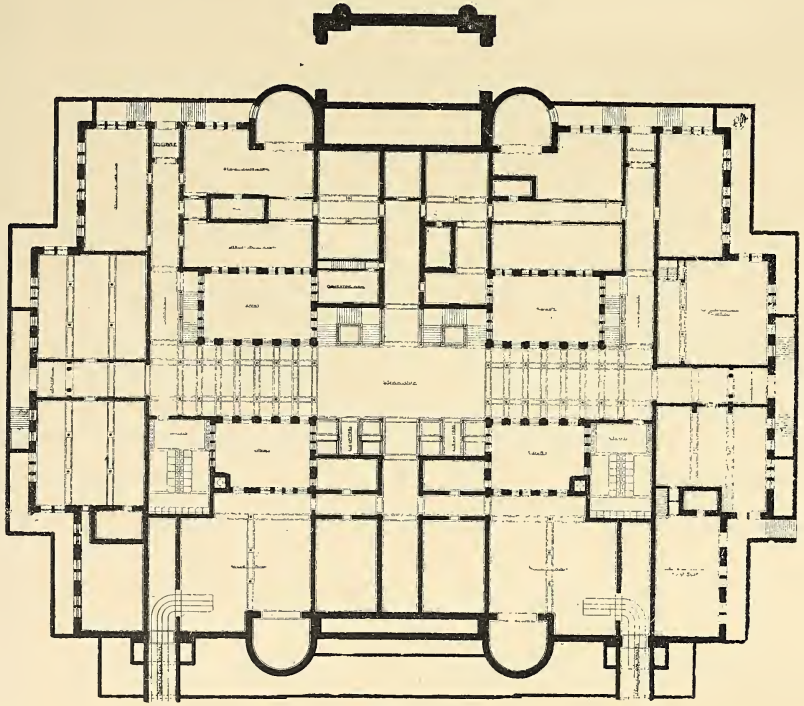
TRANSVERSE SECTION.



First Floor Plan.



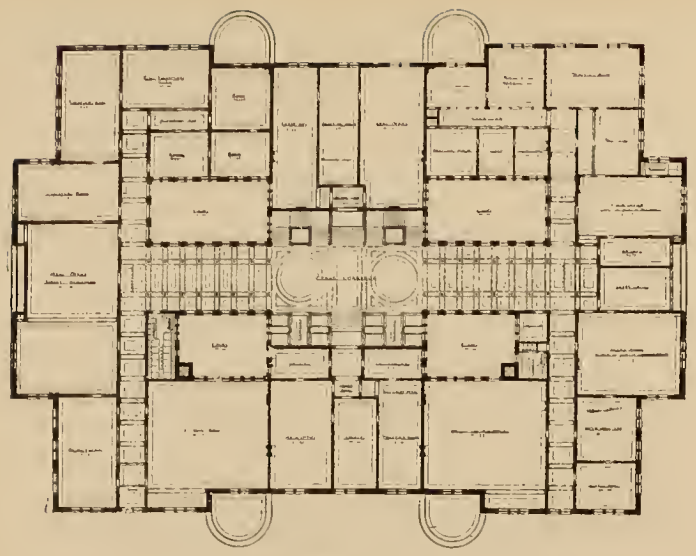
Second Floor Plan.



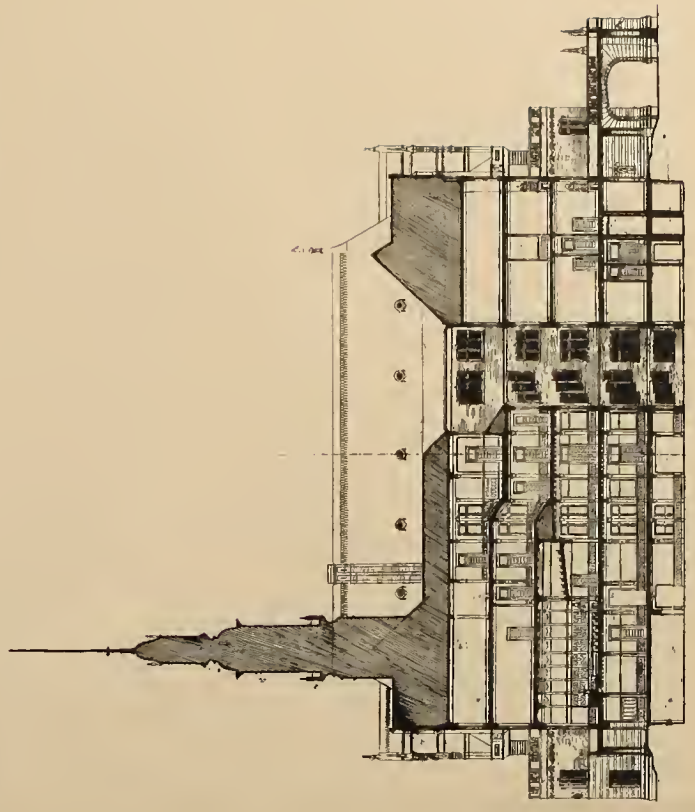
Basement Plan.

FLOOR PLANS AND TRANSVERSE SECTION OF "ST. LOUIS, 1890," ACCEPTED DESIGN.

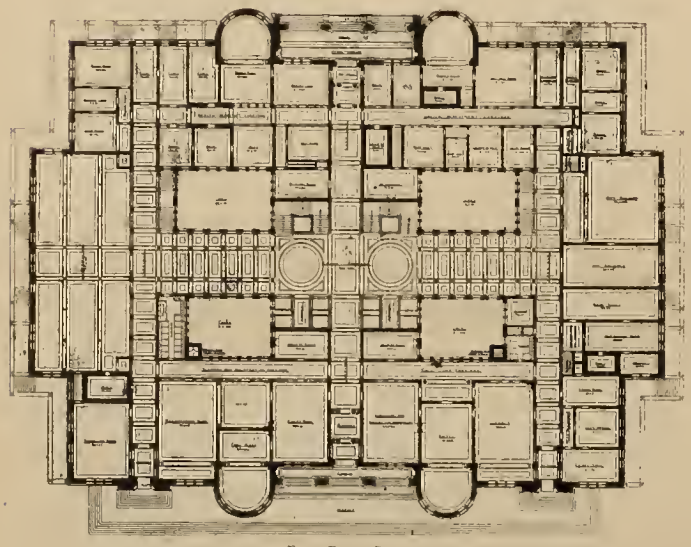
Eccle & Mann, Architects, St. Joseph, Mo.



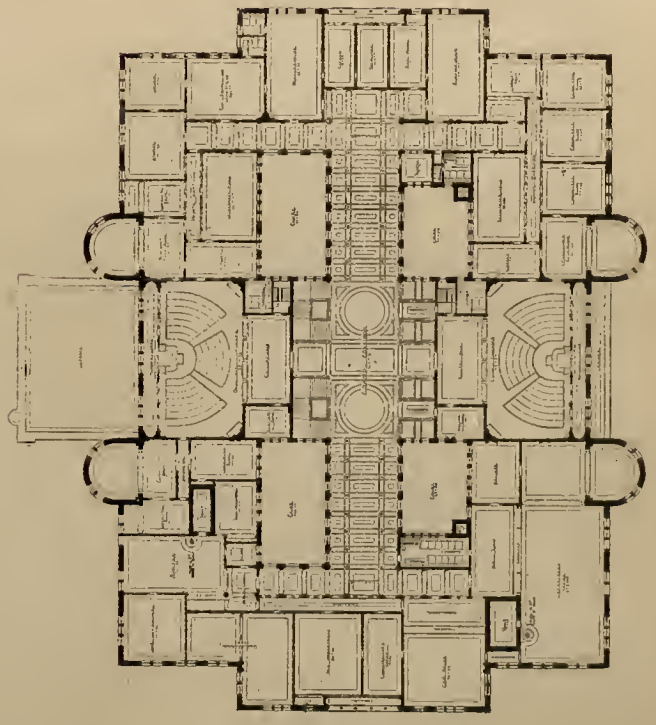
Third Floor Plan.



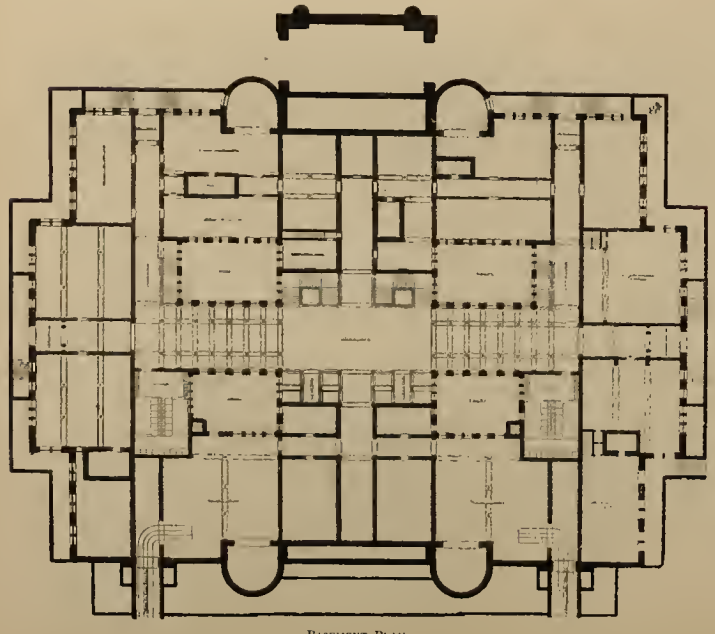
Transverse Section.



First Floor Plan.



Second Floor Plan.



Basement Plan.

FLOOR PLANS AND TRANSVERSE SECTION OF "ST. LOUIS, 1890," ACCEPTED DESIGN.

Eccle & Mann, Architects, St. Joseph, Mo.

MARCH, 1890.

# THE INLAND ARCHITECT

AND NEWS RECORD.

*A Monthly Journal (with an Intermediate News Number) Devoted to*

ARCHITECTURE,

CONSTRUCTION, DECORATION AND FURNISHING

IN THE WEST.

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*Committee on Uniform Contract:* O. P. Hatfield, chairman, New York, N. Y.; D. Adler, Chicago, Ill.; Alfred Stone, Providence, R. I.

**The Owners' Side of the Competition Controversy.**

Architects always write and talk, or, to state it more accurately, write and scold about architectural competitions and their exasperating results, overlooking the fact that it is the promoters of competitions who are the principal sufferers by them. As long as they persist in this partial and one-sided view it is vain to hope for any improvement whatever. Owners will continue to set up their patronage as a bait to be competed for, and architects will continue to accept the inevitable and compete. Not all architects, indeed, but a number amply sufficient to sustain the practice. It is vain to appeal to the sense of justice of committees, whether they consist of city aldermen, of state legislators or of church deacons and elders, with a clergyman or two thrown in. Committee justice is as blind to architects' wrongs as to everything else that seems to interfere with a purpose to get the most architecture for the least money. Honesty has no chance at all as the best policy until it can show that it is also the cheapest. This done, there is no objection to the honesty, perhaps, but it is altogether a side issue. It is very rare that a thoroughly good design is obtained in competitions, because the architect who depends on the suffrages of the committee must plan not to suit his own critical taste, if he has any, but to please the committee, and observing that the tawdry, the gaudy, the meretricious always win their preference, such will be the features of the design he will offer for their discriminating favor. The maximum display possible with the minimum of cost, united with a reckless sacrifice of durable construction and a liberal amount of falsehood as to the price for which the architect will "*guarantee*" the erection of the building—these are the qualities which distinguish the plans obtained through competitions, and it is impossible to get anything better. About the year 1869 Mr. Edward Shippen, president of the Philadelphia School Board, stated in an official letter to Commissioner Barnard that the practice of obtaining school plans by competition "had proved most unfortunate, for, as a rule, the ablest and most experienced architects were averse to competition, and were unwilling to spend their talent, time, labor and money upon plans at the risk of rejection: the effect, therefore, of the advertising system was to deprive the city of the services of very many architects of acknowledged ability, and to narrow down the competition to a very limited number."

**St. Louis' City Hall a Sample Competition.**

Elsewhere we print a list of all the participants in the competition of the St. Louis City Hall, a million-dollar building, which is likely enough to cost a million and a half, if not two millions, before it is completed. The city was eminently fair in its invitation; it stated its requirements exactly and fully, offered unusually large prizes, asked only for a minimum amount of work from competing architects, engaged an expert adviser and included every inducement that architects have ever asked for in a competition scheme. It was expected that a hundred or more plans would be offered and that the best talent and experience in this country at least would be enlisted in this service. This competition has cost the city considerably over $11,000 already, beside an obligation to spend an unknown sum over $1,000,000 on the building to be erected. What is

the result to the city? There are a dozen or more architects in this country of eminent ability and talent and of national, some of them of international, reputations. There is no reason to doubt that for the $11,000 or more spent on this competition the committee could have obtained from any two or three of these architects preliminary sketches for a building thoroughly adequate to their wants and about the architectural quality of which, when erected, there would have been no question. As it is, the city has thirty-six plans instead of two. Without any disparagement to a few of the names on this list it is undeniable that more than two-thirds of them are like the hero in Gray's elegy, "to fortune and to fame unknown." The great names in our country's architecture shine by their absence. The mass of plans have been of no service to the city whatever, and the men who would have been most certain of selection had there been no competition have abstained entirely. The disappointment of the unsuccessful architects is serious, no doubt, and their aggregate loss considerable, but the most weighty and costly disappointment in such cases is that of the owner, whose money goes into the building and stays there, whether it is satisfactory or not. An architect's loss is limited to five per cent, the owner's interest is one hundred per cent.

A Threatened Strike among Carpenters in Chicago.

Since the great strike in the building trades in Chicago in 1886, in which the entire building business was suspended for months and millions of dollars in contemplated investment were withdrawn permanently and directed into other channels, the workmen have been averse to listening to the voice of the agitator. The carpenters are again beginning the preparatory work which has for its inevitable conclusion, if successful, a similar stoppage of building progress for the year. Under the cloak of a strike for an eight-hour day they demand a minimum wage of 40 cents an hour, and threaten to inaugurate a strike April 7 unless the demand is conceded by the carpenter contractors. The eight-hour day has been considered standard for many years in all trades, its adoption being a matter of policy in the particular line of work involved rather than a principle with the employer; and the Carpenters' and Builders' Association has, without discussion, decided that its employés shall work only eight hours if they do not wish to work longer, but the question of paying 40 cents per hour to all carpenters is an entirely different matter. At present "a carpenter" means all classes, from the man who whittles cedar posts and shoves joists on a building to the mechanic who places the finest hardwood trim; and while the rate is none too much for the latter it is certainly too much for the former, who, from a point of skill, is but little, if any, removed from the day laborer. The formation and maintenance of unions among workmen is right and proper, essential even; but they should be organized for mutual improvement rather than general destruction. If they should classify the trade they represent and admit none except those whose mechanical ability was demonstrated, the attitude of the contractor would at once change from one of suspicion and hostility to that of approval and coöperation. If a union card was a guarantee of specific ability rather than an assumption of arbitrary power, the contractor would heartily coöperate with the workman in all matters pertaining to their mutual interest. As it stands, the carpenter contractors of Chicago will allow their workmen to work eight hours per day if they choose, and will pay such wages as the ability of the individual warrants. The workman has an equal right to accept or reject these terms, but it is fortunate that supply and demand governs the matter and that at present there is a large supply of carpenters over the present or probable future demand.

Chicago and the World's Fair Project.

That Chicago would be chosen as the proper location for the World's Fair was conclusive to every one outside of the cities of New York, Washington and St. Louis, and to those within those competing cities who could look at the subject from a national, rather than a local, standpoint, and the result indicates that these latter were in a majority in those cities. Those who are now seeking to destroy the fair project in the senate by every method in their power are in a large measure recognized to be enemies of the cities they claim to represent, and are thoroughly un-American, enemies to the popular will and to national progress. The congressional vote established Chicago's prestige as a metropolitan city, and if this is a damage to New York that damage is now irretrievable, and its results accrue to Chicago whether a fair is held or not. The citizens of Chicago, while naturally elated at receiving so signal a victory over the combined influence of the three great cities mentioned, feel that the fair project is in every respect national, and that the success or failure belongs to the country. Until the final decision by the senate is made and some government commission or body of control having full power to act is established, we will refrain from discussing the attitude of the architects and builders in regard to the designing and erection of the buildings, our views in general having been expressed in the issue for September, 1889.

License Bill Introduced in New York Legislature.

On another page is given the full text of a bill to create a licensing board of architects in the State of New York, which was introduced in the legislature of the state, March 10, by architects J. G. Cutler, W. W. Carlin, J. H. Pierce and C. C. Colton, the committee of the Western New York State Association of Architects, upon bill to license architects. The bill has been in the hands of this committee for some time, and received several revisions, the present form being one that should meet with the approval of both architects and public. The local talent obtainable has been consulted in regard to its provisions, and every effort on the part of the profession should be enlisted to secure its favorable consideration by our legislators. It is certainly a measure which merits our best efforts, and should receive the unqualified support of every person interested in the advancement of the profession.

Examination of Architects to Practice in France.

A commission has just been appointed in France by the Ministry of Public Instruction to report the most feasible plan for regulating architectural practice. The president of the commission is M. Larroumet, the Director of Fine Arts, the two vice-presidents are Bailly and Charles Garnier, and among the members are M. Dubois, Director of the Ecole des Beaux-Arts, M. Eugène Guillaume and architects André, Lisch, De Baudot, César Daly, De Joly, Normand, Mayeux, Roussi, Journoud, Chevallier, Marteau, Bourdeix, Daumet, Trélat, Hermant and Héret; besides M. Périn and M. Mulle, both distinguished lawyers, and M. Crost, Chief of the Bureau of Museums. A better commission could hardly have been chosen.

## Romanesque Architecture.*

### Chapter XII.

### church of st. front at perigueux (france).

THE first church with cupolas which was erected in France appears to be that of St. Front at Perigueux.

According to Quicherat, "it was certainly constructed in imitation of an oriental church; its resemblance as well as its conformity to St. Mark is such that there is no danger in affirming that St. Front was a copy of it."

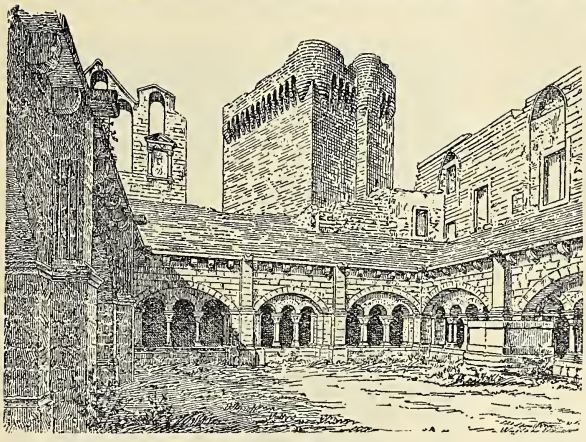


Fig. 151.

This fact has by no means been proven, and all the conjectures that have been made to explain the importation of a Venetian model into Aquitania have no worth.

"It is more natural to consider the two churches as sisters from the same mother and to search for her in Constantinople. There, in fact, existed the celebrated church of the Holy Apostles." The description which Procopeus has left us applies equally well to St. Mark and St. Front. These two churches only have a resemblance in their general arrangement, which results from common origin. The plan and section are similar to the church of the Holy Apostles, but the construction is absolutely different.

Besides, St. Front must be more ancient than St. Mark, if certain historians can be believed. They affirm that the commencement of the church of St. Front with the cupolas was contemporary with the return in 1010 of the Bishop of Perigueux from the Holy Land (a journey which we believe was only one of many, which were the effects of the lively reaction coming after the terrors of the year 1000), and that this church must have been consecrated in 1047.

It matters little that St. Front and St. Mark were built about the same time, it is certain that the first was not a copy of the second. The interesting point is to compare and study their construction so as to draw the useful lesson which is attached to the realized progress in the church of Perigueux.

We have seen in the preceding chapter the antique characteristic of the structure of St. Mark. It was built according to Roman traditions, with coarse material solidly united by an excellent mortar, and subsequently covered with sumptuous decorations, composed of the most rare and brilliantly colored marbles, and of mosaics with a gold background. St. Front, however, was built according to Syrian principles of construction, which the architects of Aquitania appropriated and which their successors carried to such a high degree of perfection. They produced a grand, monumental edifice, the stones being in regular cut courses, the arches, vaults, pendentives and cupolas of cut stone, the stone being left everywhere visible in all the beauty of its strong simplicity.

It is no longer a conglomeration of material sunk in mortar, wisely arranged for the distribution of weights and resistances, but forming a sort of concrete molded on wooden centers, and afterward decorated as in the Venetian church.

The church at Perigueux is, on the contrary, a skillful composition, each part of which had its place marked in advance in the regular cut stone for each architectural member, and in which the arches, preserving their elastic force, form, by the combined meeting on the points of support, a whole of perfect solidity and stability.

We find in St. Front one of the first applications of a new system, born in the East, but skillfully perfected in the West. We have here one of the principles necessary for the transformation of Romanesque architecture, and one of the most important causes of the rapid progress that it made throughout western Europe from the tenth to the eleventh century.

The pendentives of the cupolas of St. Front cut normally to the curve while passing from the square form of their base to the full circular one of their crowns show the embryo of the pointed arch. (Fig. 159.)

There is to be found, according to our judgment, in the arrangement of the pendentives, the principle even of the pointed arch, as indicated by A-B, in one of the cupolas of St. Front, figure 159.

But it is necessary to say a few words on the construction of the cupolas; they consist of a succession of courses forming circular lines of concave stones. "The result of this arrangement of material is that the greater part of the force which tends to throw them down is used to bind the material together, consequently there is only the slightest possible pressure of the upper layers on the lower ones, and as a result the cupola does not tend to overthrow the supports on which it rests." (Fig. 160.) This mode of construction has this advantage, but enormous piers are necessary to support the cupola, and it is only suitable to cover round or octagonal edifices. The perfection to which this construction was brought in the eleventh century resulted in raising the cupola over a square space by aid of pendentives modifying the square and carrying with the connecting arches the weight of the vaults on the piers. In these conditions the function of the pendentives, cut normally to the curve, and that of the

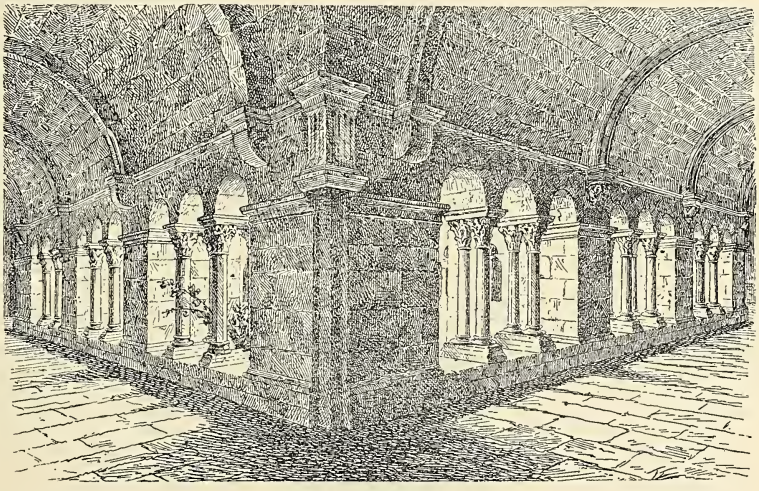


Fig. 152.

* "L'Architecture Romane," by Edouard Corroyer, Paris. Translated and abridged from the French for The Inland Architect, by W. A. Otis, architect. Commenced Vol. XIII, No. 3.

pointed arch, similarly cut, are identical, since in both cases they carry over by the connecting arches their thrust and onto the piers the weight of the filling of the vaulting.

The Romanesque architects, broken away from all professional practices, were too able constructors not to utilize the principles, while searching to perfect them, by less costly combinations. Two reasons especially stimulated their researches. First it was the question of money, a grave one at all times. The mode of construction of the cupolas necessitated piers, and connecting arches, very solid and consequently very expensive. The second point was to enlarge the churches, which, because of the severity of the liturgic laws, so powerful in the Middle Ages, could only be built or rebuilt on consecrated ground. From this resulted the necessity of modifying the vaults so as to diminish their weight by distributing it on more numerous points of support, but these supports were of less size and consequently left more available space in the interior of the church.

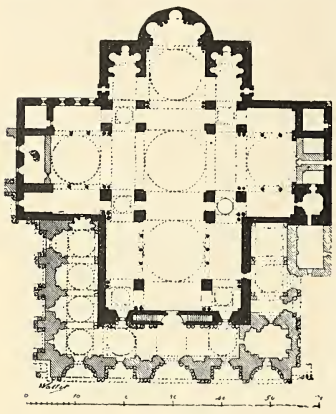


Fig. 153.

Later we will examine this economic change, after having studied the churches with cupolas, which were found in great numbers, according to the principles of construction of St. Front. The naves which crossed each other, forming a Greek cross, and which are crowned by five cupolas, are formed by powerful connecting arches which, grouped on the piers and united by the pendentives, dressed normally to the curve, 159, composed a solid course for the ovoid cupolas, on the circular plan, whose vertical thrust is equally distributed on the arches which counter-buttress each other. The piers, pierced by high and narrow arcades, establish a side passage. The outside walls, of no great thickness, are pierced with round windows.

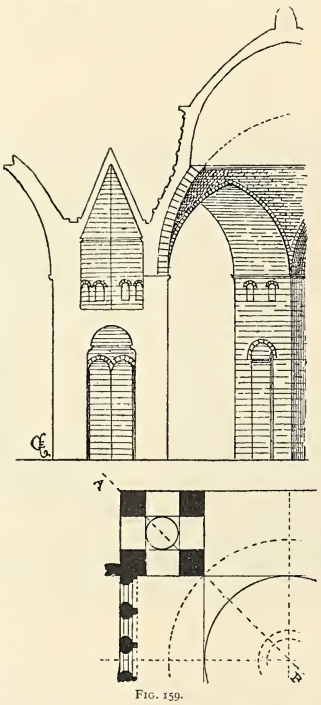


Fig. 159.

It is interesting to remark the analogy which exists between the arrangement of St. Front and St. Mark, and that of St. Sophia and the Holy Apostles at Constantinople. On the east the original hemicycle was replaced later by a more important apse, and two smaller apsides have been added in the eastern end of the north and south arms of the cross. On the west, the part of the church covered with the cupola communicating with the ancient Latin church, of which mention has been made in Chapter XI, Part I, and on the two bays of which the grand belfry, marking the resting place of the bones of St. Front was erected by Frotaire, bishop of Perigueux at the end of the tenth century.

The grand connecting arches of the church with cupolas present the peculiarity of being pointed arches. Thus, as has been stated in Chapter X of this second part, this form is a means of construction rather than an architectural characteristic, employed to diminish the action of the thrust of the full centered arch, which is much more energetic than that of the pointed arch. Moreover, the pointed arch

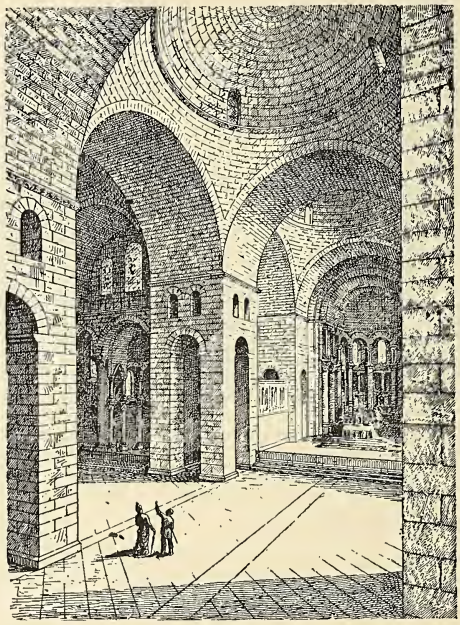


Fig. 160.

was well known before the construction of St. Front. Quicherat notes its presence at Cairo in Arabian monuments of the ninth century, in the center of Armenia, at Diarbekir, in a portico of the Roman epoch, and finally in Persia, where the constructors used no other kind from the time of the last of the Sassanides.

A form which met with such success with the most artistic people of the East was certain to be soon transported into Syria, and to then be seen by those pilgrims who came in such numbers to the Holy Land. That this form could have attracted the attention of the Latins, it must have been not only in the mosques, which they were not allowed to enter, but in edifices consecrated to Christian worship.

*(To be continued.)*

## Development of Architectural Style.*

BY GODFRIED SEMPER—TRANSLATED AND ARRANGED BY JOHN W. ROOT, ARCHITECT.†

HISTORY is much in the dark about the development of the Hellenic peripteros from its pre-Hellenic humble nucleus, the plain temple-cell erected upon the summits; but I have no doubt that its culture, historic signification and corresponding development (although not its primitive forms and elements) were the conscious conception of the same organizing minds, which were also appointed to make the constitutions of the Hellenic cities, and to establish their laws.

The Greek column-house is, in itself, the most perfect creation of architecture, but not its highest purpose. Phidias himself recognized this fact when the temple house became too small for his Olympian Zeus, and when Pallas Athene abandoned her ornamented

* Commenced in Volume XIV, No. 7.

† Material assistance to Mr. Root in this translation by Mr. Fritz Wagner, of Chicago, is courteously acknowledged in the following letter:

*Editors Inland Architect,*—In your publication of Professor Semper's essay, I alone am credited with the translation. No one well acquainted with my linguistic accomplishments will believe any such statement. The fact is, that but for the assistance of my friend, Mr. Fritz Wagner, the translation would never have seen the light. J. W. Root.

tabernacle and planted her lofty image in the middle of the castle court.

A new impulse was derived from Asia Minor, and soon showed its effect by the plotting out of whole cities and city districts according to a fixed plan, with a view to general effect. A liking for colossal widespread building plants begins to predominate, but the column-supported architrave-beam, bound to a certain limited span, does not serve the purpose. It was left for the Macedonic conqueror of Asia to put into effect the slowly fermenting revolution. His powerful mind conceived the idea of an Asiatic-African-European universal monarchy, and, assisted by his hardy architect, Dinokrates (or Dinochares, as he is also called), he hastened to give it monumental expression. He founded Alexandria, and here originated those great monuments, the fame of whose grandeur, novelty and splendor still lives, although they themselves disappeared long ago. And history also shows explicitly, that vaults, and especially the cupola, were used extensively in covering vast spaces.

A few centuries after Alexander, the Romans followed him in conceiving an empire of the world. They also borrowed from him that great art of using space, which would bear the same relation to the architecture of the Greeks as would a symphonic orchestral concert to a hymn accompanied by the lyre; provided it were as perfect in itself as the other, and provided, also, that it had been able to emancipate itself, like the other, from a slavery to necessity, the state and culture, and gain a lofty idealism. Here is its future and the future of building art in general.

Although containing the cosmopolitan architecture of the future, as I said before, the Roman style of the empire, that idea of a world empire expressed in stone, has not met with special approval from our art critics. It is difficult to define its real essence in a few words. It represents the synthesis of the two seemingly contradictory elements of culture, namely, individual aspiration, and the supremacy of the community. Around a large central space are many smaller ones of size and importance, varied according to a principle of coördination and subordination whereby all parts hold and support each other. Each part is necessary to the whole, but it never ceases to manifest its individuality, both externally and internally. It has its own specially adapted organs and members, and can, if necessary, exist independently; at least it does not indicate the necessity of material support. It was the fate of this great Alexandrian-Roman building style to be again resolved into its elements during the decline of the Roman Empire, The two most significant ones, the original Egyptian basilica and the Asiatic central structure, require closer examination. The basilica became the fundamental form of the occidental church, which found its last and most characteristic expression in the Gothic dome. But what is the latter in its essence but an Egyptian pilgrimage temple? Ecclesiasticism swallowed the temple; the church, that is, the clergy, mastered the god. That clergy knew what they were doing when they gradually developed and perfected, in a theocratic scholastic sense, the inherited motive of the church.

Constantine the Great had another idea in mind when he adopted Christianity, but did not take with it for his newly founded capital the west Roman basilica. Instead, he erected an altar for his Lord in the lofty *atrium testudinatum* of his palace. It was to become the model for all Byzantine domes. This was the architectural condensation of the imperial thought, which alone induced him to accept the new doctrine. Christ had moved into the new imperial home as house-god of the earthly majesty. It was left for Justinian, however, to complete the embodiment of this thought in St. Sophia. For what is this but a Christian Baal's temple? No Anthemius of Tralles would have invented it, if it had not been for a new victorious idea, whose architectural expression it became. The same or a closely related thought was the motive for St. Peter's cupola, which supplanted the old venerable basilica of the prince of the apostles. It is the work of that series of popes whose ideal of papacy was worldly supremacy as well as absolute sovereignty over the monarchy of the clergy. Michael Angelo, who cared neither for pope, clergy nor empire, merely used this theme as a means toward his end. He intended to emancipate the dome, and make it an ideal creation; but his successors spoiled his design by adding a baroc basilica. Even then, however, they did not carry out their own invention, but obeyed the orders of the Jesuits who had gained wonderful power. Thus was developed that pompous, overloaded, opulent, but, at the same time, thoughtless, architecture of the Theatines and the Jesuits. It was well calculated to attract the senses of the masses by thoughtless feasting in vast rooms of varied and splendid forms. We find today the same Jesuits, clad in frock and *soutane*, again mailing the *ecclesia militans* of the nineteenth century in Gothic armament, making a monitor of it. Thus they continue with modern equipment the old never-ending battle against progress, intelligence and science. This time they do not appeal to naive sensuality but to the predominating technical materialism of the mass. If time permitted it, I should still cite Louis XIV as a remarkable and a conscious founder of style. He monumentalized the imprudent phrase, "*L état c'est moi!*" This was the state principle of Richelieu, whose tendency was to crush the remaining independence of a dynastic nobility, which was opposed to absolutism, and to tame these nobles by enervating service at the court, and thus change them into firm supporters of the throne. The highest architectural expression of this idea was in Versailles; and Versailles was followed by those châteaux and Parisian hotels which even today govern the external forms of high society.

The nobility took a terrible revenge, and forced the dynasty to follow it into destruction. During the regency and the reign of Louis XV the "*Apres nous le déluge*" was architecturally translated into the Rococo style.

Thus, gentlemen, we have arrived at the end of our highly condensed review of the history of style, and I should like to close with a proof of the practical utility of our lucubrations in judging modern art objects. I am put in no small embarrassment for several reasons, yet I venture to apply them to the criticism of one single case, which, for the architectural world, forms the event of the day. I refer to the erection of a Gothic dome in the Protestant church of St. Peter in Berlin. A lecturing church, whose interior dimensions are governed by the narrow range of the voice of one single man, is swelled up to a cupola of 120 feet diameter and 250 feet in height. The Asiatic-Roman miter transformed into a colossal medieval *pickelhaube* (helmet)! Think of this last incarnation of the idea contained in the Chaldean defiance structure, this independent, self-sufficing central structure; this genuine symbol of the absolute; this copy of the world's egg! Imagine this to be resolved into its structive elements, into groin-ribs and vault shields, supported and held up by buttresses and flying buttresses, surrounded and crowned by toothed pinnacles, thus through Gothic scholasticism transformed into the opposite of its ancient traditional signification, transformed into a colossal symbol of crutch-requiring independence, or rather of dependence! Do not our previous observations of style really offer some criterion for the correct judgment and appreciation of this design? (Fortunately, owing to the good sense of the king and his household, this plan was abandoned.) We believe, if Count Bismarck would take any interest in the building department, he could gain finer inspiration from the above mentioned grand building operations of the imperial prince dethroner, Tschin-Tschi-Huan-Ti, or from the labyrinthic federal palace of the Egyptian dodecarchy for a national monument than he could by going to St. Peter for it.

Permit me to give another application of the fable. We architects are often reproached with lack of inventiveness; too severely so, because we meet no new great idea, pushed on with strength and knowledge. We are convinced that one or another of our younger men would prove himself capable of inventing the proper architectural clothes for such an idea, wherever it should actually prevail. Until that time comes, we must try to exist with what we have.

(*Concluded.*)

## Certificate of Incorporation, A. I. A.



THE new American Institute of Architects, formed by the consolidation of the old association of that name and the Western Association of Architects, having taken legal advice upon the matter, so arranged the amalgamation as to continue under the corporate name and charter of the old association. This charter was granted by the State of New York in 1857. The certificate of incorporation shows the trustees to be nine in number, of whom Richard M. Hunt, the present president of the Institute, and Richard Upjohn are still on the membership list. It might be interesting to note that there were seventeen names attached to the charter of the Royal Institute of British Architects when that association was organized, and this number of architects attended the first meeting preliminary to the organization of the Western Association of Architects, the former being just fifty

years the older, the charter having been granted in 1834 by King George IV. The certificate is as follows:

NEW YORK, April 13th, 1857.

CERTIFICATE.

The undersigned hereby acknowledge that they are all citizens of the United States and of the State of New York, and that in compliance with the act of incorporation, called:

"An Act for the Incorporation of Benevolent, Charitable, Scientific and Missionary Societies, passed April 12th, 1852," they have associated themselves for the purpose of forming a scientific society to be known in law as

"The American Institute of Architects."

The object of this society is to elevate the architectural profession as such and to perfect its members practically and scientifically.

The business of this society shall be conducted in the City of New York.

The number of Trustees is nine, and

| | |
|---|---|
| Richard Upjohn, Sen., | John W. Ritch, |
| Frederick A. Petersen, | Frederick Diaper, |
| Richard M. Hunt, | Joseph C. Wells and |
| Alexander J. Davis, | Henry Dudley |
| Thomas U. Walter, | |

are to be the Trustees of the society for the first year.

| | |
|---|---|
| RICHARD UPJOHN. | [SEAL] |
| F. A. PETERSEN. | [SEAL] |
| JOHN W. RITCH. | [SEAL] |
| ALEXR. J. DAVIS. | [SEAL] |
| RICHARD M. HUNT. | [SEAL] |

City and County of New York, *ss.*

On this thirteenth day of April, A. D. 1857, before me personally came Richard Upjohn, Frederick A. Petersen, John W. Ritch, Alexander J. Davis and Richard M. Hunt, to me known to be the same individuals described in the foregoing instrument, and severally acknowledged to me that they executed the same for the purpose therein expressed.

WM. SINCLAIR,
*Comm'r of Deeds.*

I consent to and approve of the filing of the within certificate.
New York, April 13th, 1857. S. S. ROOSEVELT,
Correct copy. *Justice of the Supreme Court.*

## New York State License Bill.

A BILL to create a licensing board of architects in the State of New York was introduced in the legislature of that state, March 10, by the Western New York State Association of Architects. It is entitled, An Act to Regulate the Practice of Architecture, and reads as follows:

*The people of the State of New York, represented in senate and assembly, do enact as follows:*

SECTION 1. Within sixty days after the passage of this act the Western New York State Association of Architects and the New York Chapter of the American Institute of Architects may each, at a duly called meeting thereof, nominate four of its members for appointment as members of the state board of architects and may transmit such nominations, duly certified by its president and secretary, to the governor of this state. The governor shall thereupon appoint seven persons to constitute the state board of architects, as follows: Two shall be appointed from the members so nominated by the Western New York State Association of Architects, one of whom shall be designated to hold office for one year; two shall be appointed from the persons so nominated by the New York Chapter of the American Institute of Architects, one of whom shall be designated to hold office for one year; one shall be so appointed from the persons constituting the faculty of architecture of Columbia College; and one shall be so appointed from the persons constituting the faculty of architecture of the Cornell University; one of the persons so appointed from one of the said faculties shall be designated to hold office for one year; one of the persons so appointed shall be a lawyer of at least five years' standing. Each person so appointed shall hold office for two years, unless so designated to hold office for one year. Annually thereafter the Western New York State Association of Architects and the New York Chapter of the American Institute of Architects shall each nominate for appointment by the governor in like manner two of its members, from whom, in each case, the governor shall appoint one member of the state board of architects for the term of two years. Upon the expiration of the term of office of the member appointed from either of said faculties of architecture, the governor shall appoint from said faculty one person as successor to such outgoing member, to hold office for two years. Upon the expiration of the term of office of the person appointed from the legal profession as a member of said board, the governor shall appoint a person qualified in like manner as his successor for a term of two years. Each member shall hold over after the expiration of his term until his successor shall have been duly appointed and qualified. Any vacancy occurring in the membership of the board shall be filled for the balance of the unexpired term in like manner. The members of the board shall serve without compensation or reimbursement for their services and expenses from the state.

SEC. 2. The members of the state board of architects shall, before entering upon the discharge of their duties, take and file with the secretary of the state the constitutional oath of office. They shall annually elect from their number a president and a secretary, who shall also be treasurer, to hold office for one year. The board may adopt rules and regulations to govern their proceedings not inconsistent with this act. The board may adopt a seal and the secretary shall have the care and custody thereof, and shall keep a record of all the proceedings of the board, which shall be open to public examination. Five members of the board shall constitute a quorum; but the board may delegate the examination of applicants to a committee of less number to report the examination to the board. Special meetings of the board shall be called by the secretary upon the request of any two members by giving at least five days' written notice of the meeting to each member. The board may adopt rules and regulations for the examination and licensing of applicants for licenses to practice architecture in accordance with the provisions of this act, and may amend, modify and repeal such rules and regulations from time to time. The board shall immediately upon the election of each officer thereof, and upon the adoption, repeal or modification of the rules and regulations for the licensing of applicants, file with the secretary of the state, and publish in at least two architectural journals, the name and postoffice address of each officer and a copy of such rules and regulations, or the amendment, repeal or modification thereof.

SEC. 3. Provision shall be made by the state board of architects for holding examinations of applicants for license to practice architecture at least once in each year, if there shall be any application therefor, in each of the judicial departments of the state, except the second judicial department, and any person over twenty-one years of age, upon the payment of a fee of $5 to the board, shall be entitled to enter any examination appointed for determining the qualifications of applicants for such license. If the examination of any applicant for a license shall be satisfactory to a majority of the board, a license shall be issued to the applicant authorizing him to practice the profession of architecture, upon the payment of an additional fee of $15. A person who shall at the time of the passage of this act be engaged in the practice of architecture in this state, shall be entitled to such a license without fee or examination on presenting to the state board of architects an affidavit to that effect. Each person so licensed shall cause the same to be recorded in the clerk's office of the county of his residence, or, if a non-resident of the state, in the county in this state in which he shall have an office, and the clerk shall record the same upon payment to him of his fees at the same rate as for recording a deed. Upon every change of such residence or office from such county to another county in this state, the holder of such a license shall cause the same to be recorded in like manner in the clerk's office of the county to which such residence or office shall be changed. The board shall keep on file in the office of the secretary of state a correct list of all licensed architects.

SEC. 4. Any license so granted may be revoked by the state board of architects for gross negligence, recklessness or dishonest practices of the holder thereof; but before any license shall be revoked, such holder shall be entitled to at least twenty days' notice of the charge against him, and of the time and place within the county of his residence of the meeting of the board for hearing and determining of such charge. For such purpose the board shall have the powers of a court of record sitting in the county in which their meeting shall be held, and issue subpœnas, and to compel the attendance and testimony of witnesses. Witnesses shall be entitled to the same fees as witnesses in a court of record, to be paid in like manner. The accused shall be entitled to the subpœna of the board for his witnesses, and a reasonable opportunity to produce his witnesses before them, and to be heard in person or by counsel in open public trial; and no license shall be revoked except by the unanimous vote of all the members of the board.

SEC. 5. If a person shall pursue the practice of architecture in this state, or shall engage in this state in the business of preparing

plans, specifications and preliminary data for the erection or alteration of buildings, or shall advertise or put out any sign or card designating himself as an architect having an office or doing business within this state, without a license therefor in accordance with the provisions of this act, shall be guilty of a misdemeanor, and upon conviction shall be fined not less than $50, nor more than $500. But nothing herein contained shall be construed to prohibit any person in this state from acting as architect of his own building, or as architect for any person employing him with full knowledge on the part of such employer that the person so employed is not a licensed architect in accordance with this act; nor to prohibit architects residing in other states and not having an office or carrying on a general business in this state, from competing for a special building, or from visiting the state for such purpose in person; nor to prohibit students or employés of licensed architects from acting for or upon the authority of such licensed architects.

SEC. 6. The license fees received by the board may be expended for the payment of the traveling and other expenses of the members of the board. An itemized account of such receipts and expenditures shall be kept by the secretary of the board, and a report thereof for each year ending with the thirteenth day of September, duly verified by the affidavit of the secretary of the board, shall be filed with the secretary of state within sixty days thereafter. Any surplus of such fees exceeding $500 shall be paid annually by the board to the treasurer of the state.

SEC. 7. This act shall take effect immediately.

## The St. Louis City Hall Competition.

THE result of the competition for a city hall for St. Louis, Missouri, is illustrated by the six prize designs published in this and the preceding number of THE INLAND ARCHITECT, and shows Professor W. R. Ware's choice from the thirty-six sets of designs and plans submitted.

The history of this competition needs little recapitulation to readers of this journal. In April of last year the commission issued an advertisement inviting architects to send in competitive drawings, but the competition code was so defective as to bar out all self-respecting architects from competing. We recognized the honesty of the commission, their fault being from ignorance of professional ethics rather than from a wish to institute anything but a fair competition, and upon THE INLAND ARCHITECT pointing out the defects the first code was withdrawn and modified. This, while still retaining an objectionable clause, making the prize design the property of the city, was in the main as satisfactory as such free-for-all competitions can be, and the agreement has been carried out to the letter by the city hall commission.

The ordinance under which the competition was authorized called for a competition for a building to cost $1,000,000, and provided $10,000 to be paid the six competitors deemed most meritorious by the commission. The protest referred to resulted in the revision of the code already published in conformity with the ordinance, and the appointment of Prof. W. R. Ware as expert to adjudicate the competition.

It is almost universally conceded that the design "Pro Patria," selected as the best by Professor Ware, was really the best architecturally and would have been adopted without hesitation by the commission, but whether because so directed by the commission (which is not probable) or through misunderstanding the clause in the code "A design will be excluded from competition * * * or if it be found that its probable cost will exceed the limits herein named by more than fifteen per cent," or the seven designs selected may have, in the opinion of the expert, come within the required $1,150,000, an opinion differed from by the commission, though he says nothing in regard to the cost in his report; in any case it was a serious mistake on Professor Ware's part to overlook this, the most important part of his work, which compelled the commission to employ another expert to decide upon the best of the six designs selected that came within the appropriation. For this work Architect J. J. McGrath, of St. Louis, was employed, and his report gave the first prize to the design rated fifth in the expert's report, as the only design that could be executed for the money, his decision being one solely relating to the cost of the structure, a work that was laborious and apt to give much dissatisfaction to those who had been placed first in the expert's report, but one that was carried out carefully and faithfully.

The design "Pro Patria," placed first by Professor Ware, and that marked "St. Louis, 1892," awarded the first prize through Architect McGrath's report regarding cost, were published in the February number. The remainder are given in this edition.

The architect's description of "Pro Patria," placed first by Professor Ware is as follows:

The structure is a thoroughly fireproof building, in modern style of architecture, with all improvements in heating, ventilating, plumbing and lighting known to the profession. Beside the material specified in the code of competition, nothing but the very best material known to the builders' and finishers' trade to be used. All the outside elevations, including steps and *porte cochere*, to be of Missouri granite, the roofs of the best slate on iron construction, and nothing but copper to be used wherever metal is necessary. All windows throughout the building to be provided with the very best French plate glass.

The basement contains the street service department, the storeroom for supplies, and the record room of the city register. Furthermore, ample space for the muniment rooms, and sufficient space for the heating apparatus and all necessities to it. Water-closets are provided for, and three entrances from the two side elevations and rear elevation permit the direct entrance from the out side to the basement. There are from the rear elevation two entrances for wagons to supply the boiler house with the necessary coal. Coal slides are provided for, so as to unload the coal direct to the boiler house. The two staircases in the side halls, with elevators, will do the service from the upper floors to the basement. The two great courts could be used for military companies to have their exercises. There is ample space for an electric light plant.

The first floor contains the departments required by the code of competition. The front of the building is an imposing loggia with a monumental step. The main staircase to be of marble with marble wainscoting, embracing, also, the vestibule. There are, besides the main stair, two other stairs, favorably located in the building, so that each entrance is in direct connection with a staircase. These two staircases to be of granite or iron. One freight and three passenger elevators, of the best patent, assist the traffic of the public in the building. All elevators to be hydraulic. There are sufficient water-closets, janitor's room, janitor's closet, and the ladies' toilet provided for. This section is so located to not interfere with the elegance of the structure, but has still a central location, and is well ventilated and lighted. The loggias, the vestibule and the grand stair to be highly frescoed. All the columns of the vestibule and grand stair to be of marble. The two side elevations are provided with *porte cochere* for carriages. The department of supplies and the city register are in direct connection with a separate staircase to the rooms in the basement.

The second floor embraces all departments as required by the code. In the center of the building are the balconies in correspondence with the loggias in the first floor. The delegate chamber and the council chamber to be as shown in the elevation, two stories in height, highly frescoed and ornamented. Also the audience room, mayor's office and all private offices of the commissioners to be frescoed and provided with an ornamental mantel piece. Ample provision has been made for water-closets, janitor's rooms, etc. Above the two *porte cocheres* are balconies, namely, to the delegate chamber and council chamber.

The third floor contains all required in the code. The fourth floor to be a repetition of the third floor, embracing the space above the two chambers. All halls, loggias, balconies and platforms in stairs to be laid with the best imported encaustic tiles. The halls of the basement and the two courts to be asphalted. All wood finish doors and windows, counters, etc. (with the exception of basement), to be of white oak in natural oil finish. All wooden floors to be of the best selected heart pine.

Following is the architect's description of the design, "St. Louis, 1892." Eckel & Mann, of St. Joseph, Mo.:

The new structure will be erected in the center of Washington Park, with the eastern main entrance directly opposite the intersection of Walnut and Twelfth street. It will be built of Missouri red granite for the basement and first story, and the remaining three stories will be of pressed brick and terra cotta trimmings. The style of architecture employed is the Norman-French of the period of Louis XIV. It will be a thoroughly fire-proof structure throughout, provided with marble floors, wainscoting and staircases, two elevators and slated roof. The dimensions of the building will be 328 by 228. The height of the tower which will appear on the Twelfth street front will be 232 feet from the street line to the top of the flag-staff.

On the first floor, facing the Twelfth street front and ranged respectively to the right and left of the main corridor, which extends from the eastern to the western main entrance on Thirteenth street, are a board room 28 by 40, the special tax department of the same size, a room for a copy-clerk 25 by 32, another room 25 by 25, a room for the storage of records 25 by 45, and the registration room 29 by 48. About midway between the main corridor running east and west, and the Market street and Clark avenue fronts, respectively, are two other parallel corridors.

The Thirteenth street front has the offices of the health commissioner and separate rooms for clerks, a board room, secretary's room, office of the chief of detectives, besides the necessary vaults for the safekeeping of books and records.

The Market street side is faced by a secretary's office, store-room, bookkeeper's room, private room and the general offices of the registration department. The Clark avenue front is lined by the offices of the water rates department, a large room 47 by 107 feet, the general office, 17 by 28, and waiting rooms, 17 by 28 and 11 by 21 feet.

Extending between the Market street and Clark avenue fronts are three corridors. Surrounding the intersection of the two main corridors are the elevators and staircases, four courts, several small rooms and necessary vaults. The intervening space on the first floor is taken up by the police department and collector's offices.

On the second floor the council and house chambers occupy respectively the Twelfth and Thirteenth street fronts, the dimensions being 65 by 70 each. On this floor are also offices for the mayor, his secretary, secretaries of the house and council, galleries, lavatories, and other rooms arranged in a bewildering state of confusion to the uninitiated in the mysteries of architecture.

The officers of the board of public improvements, building, park, harbor and water and sewer commissioners are symmetrically arranged on the third floor, with plenty of room to spare.

The basement has ample space for the two large boilers and heating apparatus, the electric light plant, a "fumigation" room, supposed to be an appurtenance to the health department, and various vaults, closets and storage rooms.

Professor Ware's report to the commission, the premium award and the list of the remaining competitors is as follows:

PROFESSOR WARE'S REPORT.

NEW YORK, November 29, 1889.

*To the Hon. Edward A. Noonan, Esq., Mayor:*

DEAR SIR,—I have carefully examined the competitive designs for the proposed City Hall in St. Louis, upon whose respective merits you have done me the honor to request my judgment and advice, and submit herewith the results of this examination.

The first step of the process by which these conclusions were reached consisted in a cursory examination of all the thirty-seven plans submitted, with a view of eliminating all those which should appear manifestly unsuitable. Fourteen designs were thus laid aside, twenty-three being retained for further consideration.

The second step consisted in the selection of six of the most attractive exteriors, as shown by the perspectives, or by the front elevation where the perspective was wanting.

As a third step, the entrance or first-floor plan, the second-floor plan and the front elevation of each of the twenty-three designs selected were hung upon the walls of a large room and carefully examined with reference to their respective merits in regard to general distribution; the interior architectural effect; the grouping of the offices and their detailed arrangements and shapes; lighting and natural ventilation, and of minor conveniences, such as toilet rooms, elevators and the like. Each plan was in turn compared with every other in regard to each point considered, and was marked on a scale of one hundred; the marks thus recorded were then carefully gone

over a second time, the plans being more minutely scrutinized, with the result that there appeared to be no doubt that nine among them were distinctly superior to their fourteen rivals, which were accordingly laid aside as rejected.

On comparing these nine sets of plans with the six exteriors previously selected, *five* proved to bear the same ciphers. The descriptions sent with each plan were then read, in order to make sure that no point of merit was overlooked. The result simply proved the carefulness of the examination already made, no point of any importance appearing in the descriptions, which had not already been observed and noted.

Then followed a renewed examination of the plans and elevations in detail; the nine designs being ranked in order of merit. It appeared that the six best of this number were those marked "Pro Patria," "Faith," "Civic," "Star and Crescent," "St. Louis, 1892," and "Unity," in the order given; that marked "Draeq" being next in excellence.

Meanwhile, a computation was in progress of the cubic contents above ground; of the total length of exterior walls (including walls of courts); of the total ground-floor area, and of area occupied in each floor by courts, corridors and stairways; the results of which appear in the detailed descriptions of the seven prize designs herewith submitted.

Finally, the twenty-eight designs previously thrown out were reëxamined, in order to make doubly sure that no point of excellence had been overlooked in any of them, and that the best of them was after all inferior to the lowest in merit of the nine ranked above them. The result of this examination in no wise altered the conclusions already reached.

Following are the detailed reports upon the *seven* designs finally ranked highest:

1. "Pro Patria."—Four out of these seven designs show an oblong plan with two large interior court yards. Of these, distinctly the best is in my judgment that marked "Pro Patria." The arrangement is simple and easily understood. All the rooms and corridors are well lighted, communication is ample and direct, and is facilitated by secondary passages, connecting the rooms that belong together; and the arrangement of offices seems sensible and convenient, while the basement entrances to the courts, and the isolated position of the water-closets are excellent features.

In point of architectural character and effect this seems to me to be even more distinctly superior to the others. The exterior is remarkably simple and delicate, and the effect is gained without the employment of useless and expensive features. Moreover, if it should prove undesirable to build a tower, this design would suffer from the omission less than almost any of the others. This simplicity of treatment would to a considerable extent affect the expense entailed by the size of the building, for in floor space it is larger than any of those under consideration, except that marked "Star and Crescent."

In regard to the three large rooms on the second floor it is difficult to say, without knowing how many people are to occupy them, whether they are or are not of convenient shape. But considerable changes might be made in this regard without materially affecting the main features of this design.

Taking it all together this is not only, as it stands, the only one of those presented that could be erected without serious modifications, but it is the one that evinces, in my judgment, the best artistic resources on the part of its author. I emphatically recommend it for the first prize.

2. "Faith."—This design has the merit of clearly distinguishing, both in plan and in external aspect, between the legislative and the executive departments, which is an architectural merit of great importance. It is also very compact, and in general well arranged. The stairs are monumental and well placed; the corridors straight and ample; the elevators and back stairs conveniently situated; the entrances ample and elegant. The legislative halls in particular not only form a most elegant external feature of the design, but are in themselves and internally, architecturally imposing, and better shaped for large numbers than those in "Pro Patria." On the other hand, the important treasurer's office is given no architectural importance; a number of the other offices are lighted only from small covered courts, getting no outdoor sun and air; the corridors receive comparatively little direct light, and the toilet service is insufficient. The exterior is of monumental outline and decoration, but fails singularly in the treatment of the windows, which is confused and unsatisfactory. The great length and narrowness of the building give it in perspective proportions less pleasing and impressive than those of "Pro Patria." On the other hand, it covers considerably less area, and would probably be less expensive.

3. "Civic."—The plan marked "Civic" is well studied. The executive and legislative departments are well grouped and fairly well expressed by the external design; the treasurer's office, the mayor's department and the two houses of legislation occupy the central masses of the four façades. The offices are in general and in detail very well arranged, the corridors direct, ample and admirably lighted. The main entrance, hardly important and dignified enough, leads to an imposing hall and double staircase, while the end entrances and stairways are admirably disposed. All the accessories, such as toilet rooms and elevators, are ample and well arranged, and basement driveways from Thirteenth street give access to the courts. The natural lighting and ventilation are everywhere excellent, and artificial ventilation has also been carefully studied and provided for. The masses are, however, too much broken externally, producing an excessive length of exterior wall and injuring the repose of the design. The exterior is uninteresting and monotonous, the tower too high and too heavy. The cost of erection would probably considerably exceed that of "Pro Patria," and certainly that of "Faith," and without adequate return of elegance and architectural dignity. To this cost the engine and boiler rooms under the court would materially add; as would also the tower, without which the design would be, however, very uninteresting.

4. "Star and Crescent."—This plan (marked "Star and Crescent") shows the largest total frontage and the largest ground-floor area of all the seven designs under consideration. The central hall or covered court would seem unnecessarily large and costly. The general arrangement of stairs and corridors is excellent; the entrances are convenient and ample though not altogether imposing; and accessories of elevators and water-closets are well placed for convenience and ample for comfort. The lighting is everywhere good. But the two legislative halls are placed where they give no expression to the exterior, and the entrance to them seems awkward. The exterior is somewhat monotonous, but the general effect is very rich, dignified and appropriate. This would doubtless be much the most expensive, as it is the largest of the buildings shown.

5. "St. Louis, 1892."—The design marked "St. Louis, 1892," is the most compact of them all; the halls of legislation and treasurer's office are given positions of architectural importance, but the latter is unduly prominent externally, while the former are externally diminished in importance by the bays that flank them; the exterior is consequently less expressive than in some of the other designs. It lacks repose and simplicity, being greatly injured by the two bays just mentioned. The main entrance is hardly adequate, but the main hall, the double staircase and the elevators are very happily combined. The stairs, main corridors and offices vary in this respect, from admirable to poor.

6. "Unity."—The design marked "Unity" shows an imposing hall and staircase reached by an inadequate entrance, well-arranged end entrances and stairs, and well-lighted communications and generally commendable disposition of offices. But on the first and second floors are several offices behind loggias less well-lighted, and the whole outline of the plan is unreasonably irregular. The tower appears irrelevant, and the exterior is unsatisfactory; in style and detail hardly befitting the character of the municipal building of an important city. Nevertheless, this design possesses sufficiently the merits of dignity, simplicity and architectural availability to render it worthy, in my opinion, of a place among the five that merit a second prize.

7. "Draeq."—In the design marked "Draeq," the separation into three parallel structures is vicious from the point of view both of plan and of elevations, requiring an extravagant amount of staircases and corridors, and destroying the unity and simplicity of the exterior. But the elevations are as a whole, dignified and imposing, though cut up by a strange confusion of levels of windows and cornices. The corridors are dark and ill ventilated. Legislative chambers are admirably emphasized in elevation, but have the grave defect of communicating across the main public entrance hall, while the scale of the whole building, especially of entrances and stairways is too vast for the requirements of this problem. On the other hand, the architectural treatment, especially of the rotunda, is so imposing, and the central feature of the dome, with its four flanking turrets, is so praiseworthy for elegance and dignity of line, that it appears only fair to award to this design, in spite of its grave and fundamental defects, a special honorable mention.

In conclusion, it is fair to add that among the designs set aside as inferior to the seven above reported, were two or three which presented features worthy of high commendation, either in the treatment

of the exterior, or in the arrangement of portions of the plan. But on a careful collation of these, with those embraced in the above report, it became only the more apparent that these particular excellences were far outweighed by radical defects of fundamental conception or of general treatment, revealing an evident inability to grasp and handle so important a problem.

I am, very respectfully, your obedient servant,

WILLIAM R. WARE.

PREMIUM AWARD.

MAYOR'S OFFICE, ST. LOUIS, February 14, 1890.

The undersigned, comprising the City Hall Commission, acting under authority of ordinance 15,028, approved April 4, 1889, on due consideration and judgment of the plans submitted for the new City Hall in St. Louis, do award the sum of $5,000 for the plan marked "St. Louis, 1892," which, on opening the sealed envelope bearing said design, appears to have been prepared by Eckel & Mann, of St. Joseph, Missouri, and the same is hereby adopted.

The five plans deemed meritorious by the commission, although not adopted, each of which is entitled to the award of $1,000, are the following: "Pro Patria," by Sidel, Ginssart & Ginder, of Birmingham, Alabama; "Faith," by Carrere & Hastings, of New York; "Civic," by E. F. Fassett and A. J. Russell, of Kansas City; "Star and Crescent," by W. H. Dennis, of Minneapolis, and "Unity," by James & James, of New York.

EDWARD A. NOONAN, Chairman, Mayor,
JOHN D. STEVENSON, Comptroller,
HENRY FLAD, President Board of Public Improvements,
C. P. WALBRIDGE, President of Council,
HENRY ALT, Speaker of the House,
LEVERETT BELL, City Counselor.
} *City Hall Commission.*

LIST OF COMPETITORS.

"Draeq," Fassett, Russell and Maybeck, Kansas City and New York.
"Black Berry," Theodore C. Link, St. Louis.
"MDCCCLXXXIX," McKenzie & Benedict, New York.
"As You Like It," Albert Knell, St. Louis.
"Four Leaf Clover," 506, Will A. Freret, Washington, D. C.
"E. C. C. O.," C. H. Blackall, Boston.
"Tezpisa," John Eisenmann, Cleveland, Ohio.
"Seneca Chief," William A. Youmans & Co., Chicago.
"Chef D'Œuvre," Sidel & Ginder, Birmingham, Ala.
"Horseshoe on Shield," Eckel & Mann, St. Joseph, Mo.
"Eureka," O. Von Nerta, Washington, D. C.
"Riverside," Harry Hilliker, St. Louis.
"X. X. X.," C. W. Murdock, Columbus, Ohio.
"Louis IX," George B. Ferry, Milwaukee, Wis.
"Common Sense," Arthur L. Tuckerman, New York.
"Hones Altit Artes," D. T. Atwood, New York.
"Buono," James Stewart & Co., St. Louis.
"Cosmos," Hull & Ueffinger, New York.
"Fulfilled," Thomas J. Furlong, St. Louis.
"Six-Pointed Star," James Stewart & Co., St. Louis.
"1492-St. Louis-1892," J. C. Cairns, St. Louis.
"Crescent and Star," Thomas Boyd, Pittsburgh, Pa.
"Ad Rem," E. Jungenfeld & Co., St. Louis.
"Bona Fide," Tully & Clark, St. Louis.
"La Salle," Foster & Ittner, St. Louis.
"Nip and Tuck," Leicester & Skinner, Wichita, Kan.
"Three-Leaf Clover," Aug. Fiedler, Chicago.
"Surplus," J. W. Yost, Columbus, Ohio.
"Big Bridge Radial," Wesley A. Arnold, Chicago.
"Plan," F. B. Townsend, Chicago.
"Missouri Granite and Brick," F. W. Settan, Kansas City, Mo.

## Personal.

MR. EDWIN L. MERRILL has reopened the Des Moines office of Hackney & Merrill, succeeding that firm. Mr. Hackney retains the Kansas City office in his name.

MR. W. H. ARCHER (late of Curtis & Archer, Fredonia, New York), well known in Ohio, and Mr. W. W. Johnson (late of Falkner & Johnson, Buffalo, New York) have formed a partnership under the name of Johnson & Archer, Architects, No. 9, German Insurance Building, Buffalo, New York.

IN the report of the discussion of M. B. Sullivan's paper on Sub-Contracting, read before the late convention of the National Association of Builders at St. Paul, second day's proceedings, the speech attributed to A. G. Murray, of Chicago, should have been credited to another Chicago delegate, F. B. Gindele. It was a speech almost any delegate would indorse, as it expressed the sentiments of the large majority who supported Mr. Sullivan's able arguments.

## The New York Grant Monument.

THE Executive Committee of the New York Grant Monument Association have made a final report to the association on the designs for the monument. The report is as follows:

We would recommend that the first competition be declared closed. Of all the designs submitted which comply with the conditions none are, in the opinion of your committee, worthy of the indorsement of the association to be executed as a monument or building to perpetuate the memory of General Grant. Among those which failed to receive prizes from the expert committee were many of merit. In fairness to the artists who have competed and complied with the association's circular, we recommend payment to the authors of five designs.

Committee: Alonzo B. Cornell, Adolph L. Sanger, C. H. Woodman, C. O'Reilly, C. H. T. Collis and E. M. Knox.

The first prize, $1,500, was awarded to Cluss & Schulze, architects, in the Corcoran Building, Washington. Their work bore the motto, "Sword and Laurel." Prize No. 2, of $1,000, was awarded to Mr. J. Phillip Rinn, 194 Washington street, Boston. This design bore the motto, "Pro Patria." A design bearing the legend, "1822," received $500. This was the work of Harsu & Werkelmann, of Leipsic, Germany. The fourth prize, $300, was awarded to J. A. Schweinfurth, 62 Devonshire street, Boston. His work was called, "Let Us Have Peace." Another design bore the same motto. The fifth prize, $200, went to Herbert A. Gribble, 10 Sydney street, South Kensington, London. Mr. Gribble marked his work, "D. O. M."

The association adopted the report and left the further proceedings to the Executive Committee.

The report of the expert committee of architects, N. Le Brun, William R. Ware, George B. Post, Solomon Woolf and James E. Ware, says:

The results of the examinations show that the terms of competition, which provided simply that five designs were to be purchased for the amount of certain cash premiums, did not offer sufficient inducements to lead men of established reputation and experience to undertake the labor and expense of preparing drawings, for it is found by your committee that only a very few of the schemes submitted are worthy of serious consideration, and that even these consist either in a general plan or scheme which is good, coupled with details which are commonplace, if not actually bad, or of radically bad general schemes with well-studied outlines.

Commenting on the first prize design, which is really two designs, the original scheme consisting only of the tall shaft, while the equestrian statue on a pedestal, in front of the shaft was sent in as an alternative plan, the experts' report says:

The general scheme is very good. The architectural details are commonplace. However, if properly studied, the scheme would make a fine monumental structure, and it has the great merit of being proper for the situation, and equally imposing if seen either from the park, the drive or the river.

Design No. 2, "Pro Patria," received general commendation for its originality and simplicity. It consists of an ornamented, obelisk-like shaft, on a simple base, and crowned by a statue of liberty.

At the time the report was made to the Executive Committee several members disagreed with the experts as to the selection of the first design, and respectfully requested the experts to go over the designs again, and make sure that they were unanimous. The experts replied that they thought their selection to be a fair one, and added:

We will suggest that this design be adopted by your committee as a basis of further procedure, and that further designs upon this basis be obtained from the author of this design, and, if the committee see fit, from other persons, the main idea of the scheme being embodied in instructions for a second competition.

The treasurer's report showed the fund deposited to the credit of the association with the United States Trust Company to be $141,593.60. It is proposed to spend $500,000 on the monument. It is now over a year and a half since the circular asking for designs was sent out. A resolution was passed calling attention to April 27, 1890, General Grant's birthday, as a fit occasion on which to subscribe to the fund.

## St. Paul Architectural Sketch Club.

THE second annual meeting of the St. Paul Architectural Sketch Club was held February 3, twelve members being present. The meeting was called to order by President W. D. McLaughlin, who delivered the following address:

GENTLEMEN OF THE ST. PAUL SKETCH CLUB,—It is not my intention to detain you with any lengthened address, but it seems to me, for the good of the club, that there are some things that should be said, and I will be as brief as possible. About one year ago, if you will carry your memory back, a party of draftsman met, through the kindness of Mr. Gilbert, in the office of the firm, and discussed the advisability of organizing a sketch club to facilitate study in architecture and art matters. What has been the outcome of that move? We have only to look around this room for answer. We have permanent quarters, tastily and artistically arranged, if not expensive. For this we have much to be thankful for, both in the energy and zeal exhibited by the draftsmen, and the kindness of the architects and those gentlemen of the building trades who realize that the draftsmen are the coming architects. But what are we doing to make this room a source of profit to the draftsmen and of pride to the city? I will take up, in the first place, the matter of our competitions. It seems to me if we attempted less we would accomplish more. In the daily routine of our office work we have the hard, practical part of the profession, and the thought presents itself to me, that if in the giving out of our club problems we would indulge more in the ideal and let our work be of a soothing and refreshing character, we would accomplish more. In a word our problems have been too hard for the club to do them justice. Let us have lighter problems that all may give more study to without consuming too much of their time from necessary duties. We also need an incentive for each and every member to go into every problem without reserve. This I think may be accomplished by following the admirable example of the sketch club that stands alone in the history of clubs. I need scarcely add that I refer to the Chicago Architectural Sketch Club. Let us give to the member who stands best at the end of the year, both in the number of competitions entered and the number of mentions received, some good and instructive book or photograph that he may keep as an evidence of his industry and faithfulness to the club work. I think that when we are better known in the city and the work we are doing is appreciated, that some art lover like Mr. Clark, of Chicago, or Mr. Phimister will appear and be proud to have his name upon a medal for the club to strive for. I am happy to say that our finances are in good condition and with the efforts of the united draftsmen we may hope for much success.

Mr. McLaughlin's remarks were well received, after which the treasurer read his annual report, which showed a goodly balance on

hand after every outstanding obligation had been met, and the club-room, furniture, etc., paid for.

The report of the Executive Committee included the reading of monthly problems up to July, as follows:

For February (due February 17).—Entrance to a City House.
For March (due March 17).—A Suburban Railway Station.
For April (due April 7).—An Entrance Gate and Office to a Country Cemetery.
For May (due May 8).—An Artistic Stone Balcony, in Renaissance.
For June (due June 2).—An Ideal Country Residence in the Colonial Style.

The Executive Committee announced that the necessary conditions for the respective problems will be given in ample season, and after general comments the list of problems was accepted.

The Executive Committee also presented some amendments relative to a change in the constitution, affecting the board of control, or Executive Committee and secretary and treasurer, and the by-laws, relative to applications and a working quorum. After the second reading the amendments come up for action at the next meeting, March 3, 1890.

The election of officers for the ensuing year was next in order and resulted in the following being elected:

President, William D. McLaughlin; secretary and treasurer, Lyman Farwell. Executive Committee, T. G. Holyoke and Stevens S. Haskell.

The meeting adjourned to March 3, when the final adoption of the amendments to the constitution and by-laws will be in order

## The Clark Prize Competition.

*Editors Inland Architect:* PHILADELPHIA, February 2, 1890.

As you gave considerable attention to the "Clark Prize Competition" in the November, 1889, edition of your journal, would you kindly insert this in regard to my misfortunes in connection with it in this coming issue. At noon on September 28 last, after spending each evening during the four weeks previous hard at work on the competitive drawings, I shipped the completed drawings to Chicago by the United States Express Company, all charges paid, addressed carefully according to directions given in the competition circular. I saw the committee's report in an editorial in your paper, and about ten days ago wrote for my drawings. Friday last a reply came from Mr. Gibb, secretary of the Chicago Architectural Sketch Club, saying that my drawings had not been delivered until three weeks previous to his writing (January 28). He says: "It seems that there were charges to pay and not having any one at the clubrooms during the daytime the express company would not leave them, so they held them until they found the address of the treasurer. We are very sorry, for the drawings show a great deal of study and are well executed." Though his letter was a comfort, as it showed my drawings had not as yet come in for the quite heavy criticism of your November issue, yet it was quite a blow to know they had failed of their mission. I have still the express company's receipt showing all charges were paid by me, so that they were entirely to blame in demanding the charges from the sketch club on delivery.

I am yours, respectfully,

JAMES P. JAMIESON.

With Cope & Stewardson, Architects, 212 South Third street.

## Association Notes.

### AMERICAN INSTITUTE OF ARCHITECTS.

The committee upon clerks of works, R. W. Gibson, chairman, have issued the following circular letter to members of the Institute:

At the Cincinnati convention of the American Institute of Architects a committee was appointed to consider and report upon the subject of supervision and the employment of clerks of works.

The purpose of this committee is to better define the responsibility of the architect in the matter of supervision, and also to inquire as to the best means of introducing the system of the employment of clerks of works.

The committee is collecting information, and without doubt there are many of your readers who could offer them valuable suggestions. Will you therefore kindly invite an expression of opinion upon the subject in your columns, for the consideration of the committee when it meets?

One of the questions which will arise is, Shall supervision be defined by means of a printed contract between the architect and client?

Another is, Shall this contract include stipulations that a clerk of works shall be employed in certain cases?

Any experiences or views upon the subject will be very welcome.

Yours respectfully,

R. W. GIBSON, Chairman,
D. ADLER,
W. G. PRESTON,
J. G. CUTLER,
W. R. FORBUSH,
} *Committee.*

Expressions of opinion, as requested by the committee, are not being received as generally as desired by the committee. It is a question upon which every architect should have an opinion, and its expression should reach the committee direct or through publication in the architectural press.

### CHICAGO ARCHITECTURAL SKETCH CLUB.

The regular meeting of the Chicago Architectural Sketch Club, on February 24, was devoted to a lecture by J. R. Willett, architect and engineer, upon "Graphical Analysis." Mr. Willett was clear in his demonstration of the different problems, which he illustrated by diagrams, and was listened to with the deepest attention, though much of the subject was "Greek" to the majority of his listeners, to whom he said that, while he did not expect them to understand fully, his purpose was served if he awakened in their minds an interest, and excited sufficient curiosity to induce them to commence the study of graphics, which, according to the lecturer, would simplify the figuring of all strains beyond any other system. Mr. Willett spoke of Prof. N. Clifford Ricker's book upon "Graphical Statics," as the best he knew of for students. Mr. Willett will endeavor to arrange his lecture, which was mainly from notes, for publication.

At the regular meeting of the club, held March 10, the members had the pleasure of listening to a lecture by Lorado Taft, sculptor, of Chicago, entitled "A Glimpse of a Sculptor's Studio."

The lecture was one that will long be remembered, not only for the clear and entertaining description of the details of the sculptor's art, but the artistic manner in which he used the clay, illustrating the different facial expressions that can be produced in modeling, etc. Mr. Taft is now an honorary member of the club, he having been unanimously elected.

The club has now a membership of fifty-six active members, with good prospects of a large increase within the next two or three months.

### DENVER SOCIETY OF CIVIL ENGINEERS AND ARCHITECTS.

The following list of subjects for discussion at the semi-monthly meetings of this club have been arranged, those mentioned in connection with the subject to be leaders in the discussion:

MEETINGS AND SUBJECTS FOR 1890.

Feb. 11—Address by President George G. Anderson and reports of officers and committees.
Feb. 25—Bridges and Viaducts. H. L. Aulls, John W. Nesmith, E. P. Martin and F. G. Geotzman.
March 11—Materials for Construction in Public Works and Buildings. D. W. Campbell, F. E. Edbrooke, F. S. Sterner, W. A. Balcom.
March 25—Paving and the Use of Public Thoroughfares for Street Railways. H. C. Lowrie, E. P. Martin, F. Cogswell.
April 8—Sewers and Utilization of Sewerage. R. D. Hobart, H. F. Merryweather.
April 22—Construction, Maintenance and Operation of large Irrigation Canals. E. S. Nettleton, George G. Anderson, J. S. Titcomb, W. H. Wells.
May 13—Mountain and Steep Gradient Railroads. R. E. Briggs, J. A. McMurtrie, C. W. Gibbs.
May 27—Forms and Construction of Dams and Reservoirs. W. W. Follett, J. P. Maxwell, R. R. Salter, Ernest Van Dreveldt.
June 10—Resources of the West. Gen. John Pierce, T. M. Field, J. S. Greene.
July 8—Foundations of Large Buildings. F. H. Jackson, R. A. Wilson, C. Thompson.
Aug. 12—Latest Improvements in Practice of Surveying. T. H. Withers, E. L. Rogers, Peter O'Brien, C. T. Pease, Willard West.
Sept. 19.—Local Observations of Loss from Seepage, Evaporation and other causes. Prof. L. G. Carpenter, J. C. Ulrich, Z. T. Duvall.
Sept. 23—Recent Improvements in Cable and Electrical Tramways. Geo. P. Miller, J. W. Stearns, Jr., W. P. Hardesty, J. A. Valentine.
Oct. 14—Mining and Reduction of Precious Metals. Peter H. Van Diest, Thos. F. Van Wagenen.
Oct. 28—Best Combined Systems of Lighting, Heating and Ventilating. A. M. Stuckert, Robt. S. Roeschlaub, E. P. Varian, Thos. D. Robinson.
Nov. 11—Water Supply of Cities and Villages. C. P. Allen, E. S. Davis, John J. Steavenson.
Nov. 25—Ventilation of Mines and Mining Machinery. John McNeil, E. J. Hall, J. T. Wells.
Dec. 9—High Speeds attained on Railways and the use of heavy Rails and Rolling Stock, Economical Construction and Operation. Geo. H. Angell, Wm. Ashton, R. C. Simons. Nomination of Officers 1891.
Jan. 13, 1891—Annual Meeting for the Election of Officers for the year.
Special meeting to be held on the return of R. B. Stanton to hear report on feasibility of railroad route through the Colorado Canon.

The meetings of the association are held on the second and fourth Tuesdays in each month, except in July and August.

The officers are: President, George G. Anderson; first vice-president, H. L. Aulls; second vice-president, Edmund P. Martin; secretary and treasurer, George H. Angell. Executive Committee—George G. Anderson, P. H. Van Diest, R. D. Hobart, F. E. Edbrooke, George H. Angell.

### ILLINOIS CHAPTER AMERICAN INSTITUTE ARCHITECTS.

A special meeting of the Illinois State Chapter was held February 24 to receive the report of the Committee upon Constitution and By-Laws and receive the letter ballot upon the resolution presented by the Executive Committee. President Addison called the meeting to order, the following members being present:

John Addison, O. J. Pierce, L. J. Schaub, A. F. Pashley, L. G. Hallberg, M. L. Beers, J. L. Silsbee, F. Foltz, S. A. Treat, S. M. Randolph, George Beaumont, S. V. Shipman, S. M. Palmer, W. W. Clay, C. J. Warren, Fred Ahlschlager, L. D. Cleveland, H. M. Hansen, O. H. Hansen.

After the reading of the minutes, Messrs. Treat and Cleveland acted as tellers and announced the letter ballot vote unanimously in the affimative, thirty-eight votes having been cast. The resolution was declared carried in accordance with the laws of the state. It is as follows:

*Resolved*, That the corporation known as the Illinois State Association of Architects is hereby dissolved, and that the officers of said corporation shall take such legal steps as may be necessary to effect the dissolution and wind up the affairs of the corporation.

The report of the Committee on Organization being called for, Mr. Clay reported that the committee had taken as a basis the constitution and by-laws of the old state association, and remodeled it in conformity with the new rules of the Institute. Instead of reading the rules section by section, and disposing of them in order, several members at once began to express their opinion regarding different sections. After an hour and a half taken up with this useless discussion, it was decided to print the rules and mail to each member, and discuss and adopt them at the next regular meeting.

A report of the Committee upon Permanent Quarters in favor of further delay and a continuance of the custom of meeting and lunching at restaurants was adopted, there seeming to be good reasons why this should be done.

Mr. Baumann proposed the appointment of a committee of five to consider the attitude the association would sustain toward the World's Fair, but the resolution was tabled as premature, the vote in

congress taken the day of the meeting being in no way a permanent settlement of the question, and any action in the premises was deemed inadvisable.

Mr. Clay read a letter from Mr. Root, secretary of the American Institute of Architects, regarding the bill of Mrs. Thomas U. Walters against the United States for unpaid services rendered by her husband. The letter was placed on file.

The meeting adjourned to March 17, 6 P.M., at French's restaurant, 84 State street.

## Our Illustrations.

Sketches of Florentine and Italian Ironwork. Sketched by Lucean F. Plympton, Cincinnati.

Third prize, design for the St. Louis City Hall, "Faith," Carrere & Hastings, architects, New York.

Fourth prize, design for St. Louis City Hall, "Civic," E. F. Fassett and A. J. Russell, architects, Kansas City, Missouri.

Fifth prize, design for St. Louis City Hall, "Star and Crescent," W. H. Dennis, architect, St. Paul, Minnesota.

Sixth prize, design for St. Louis City Hall, "Unity," James & James, architects, New York.

PHOTOGRAVURE PLATES.

(*Issued only to subscribers for the Photogravure edition.*)

Entrance, Church of the Covenant, Washington, D. C.

Statue of Maj. Gen. George H. Thomas, Washington, D. C.

First Baptist Church, Washington, D. C. W. Bruce Gray, architect.

Residences on Massachusetts ave., Washington, D. C. H. Wendell, architect.

National Bank of Washington, Washington, D. C. James G. Hill, architect.

Residence of Justice Harlan, Washington, D. C. Hornblower & Marshall, architects.

Church of the Covenant, Washington, D. C. J. C. Cady & Co., architects, New York.

## Building Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, March 10, 1890.

The situation in the iron trade is very encouraging, not only to those directly interested, in a heavy demand and good prices, but also to those large and diversified interests which accept the condition of the iron trade as a sure indication of what the prospects are in other branches of activity. Prices of iron and steel have weakened a little, in consequence of the quiet demand since the first of the year, but there are strong probabilities that spring and summer requirements will soon be covered; and if so, a reaction to former prices, and possibly to a higher range of prices, will be the result. It is impossible, however, to speak with any degree of certainty on this point, as the producing capacity of mills and furnaces all over the country is being so rapidly increased. The lumber trade is active, and the possibility of a restricted supply of logs has not yet affected prices or demand. The coal trade is fairly active, but the anthracite producers have been obliged to restrict their output to 2,000,000 tons per month. There is great activity among buyers of coal lands, and it is intended to develop mining capacity very largely during the coming year. The distribution of building material throughout the country is beginning on a large scale, and heavy contracts are being placed at good prices, for supplies to last builders through the summer. Confidence shown by this action is one of the most encouraging features of the situation. The distribution of general merchandise, so far as railway, clearing house and other reports go to show, is very heavy, and there is no occasion to find fault with the volume of business for the past week or two. Financially, the country is sound, and for once, threatened changes in the tariff seem to have very little effect upon business. The steel rail makers are alarmed at the proposed reduction from $17 to $10 per ton. Bank statements at eastern financial centers indicate a loss in reserve during the past week of some $4,000,000. The balance of trade for the past seven months is $112,000,000 in our favor. The export trade for merchandise, breadstuffs, petroleum and lumber, is increasing. Trade conditions are generally satisfactory, and a heavy business for the year is assured. Prices may vary unexpectedly and catch operators without the slightest warning; but the general business interests will no doubt bave a prosperous year.

## Synopsis of Building News.

**Baltimore, Md.**—Architect Charles Carson has drawn out plans for the proposed Phœnix Club House; to cost about $40,000.

Architects Baldwin & Pennington: Additions and alterations for the Catholic cathedral, at a cost of about $50,000.

**Buffalo, N. Y.**—Architect C. P. Percival has prepared designs for a brick dwelling, to be built on Hodge avenue, for Mr. U. A. Green; cost $9,000. A brick dwelling on College street for Mr. Samuel Newman; cost $6,000. A block of frame dwellings for Dr. T. B. Dort; cost $12,000.

Architects C. K. Porter & Son have prepared plans for St. Patrick's church.

Architects Fisher & Metzger have prepared plans for four-story brick store and apartment house, for Mr. Louis Bapst, to be built corner Main street and Glenwood avenue, 95 feet front, consists of four stores and twelve suites of apartments, all modern improvements, natural gas, freight elevators, electric bells, etc.; estimated cost $40,000. Frame dwelling and stable for Thomas Findel on Hodge avenue; cost $15,000. Frame dwelling and stable for C. H. Funnell; estimated cost $8,000. A double brick dwelling on Franklin street for W. H. Sherman, size 44 by 66 feet; cost $14,000.

Architect M. E. Beebe is building for R. G. Dunn & Co. a fine office building on Friagora street, of brownstone and pressed brick, seven stories high; estimated cost $40,000; will contain complete office fittings, steam heating, elevators.

Architect C. D. Swan has designed for Mr. H. C. Pichett, of Tonawanda, a brick and frame dwelling; to cost $18,000. Frame dwelling for J. C. Richardson; cost $5,000.

Architects Green & Wicks have just closed contracts for magnificent business block for Messrs. O'Day & Rockefeller. It will be built of brick and terra-cotta, will be eight stories high, dimensions 50 feet on Main street, 231 feet on Huron street, will be used for stores and offices, will be fireproof and contain complete fittings, one freight elevator and two passenger elevators, electric lighting, steam heating, etc., the style of the building will be Italian Renaissance and the cost $275,000.

**Chicago, Ill.**—Architect H. W. Huehl: Making plans for a three-story hotel, size 95 by 104 feet; to cost $30,000; to be built at Starved Rock, Ill., steam heat, bathrooms, billiard room, cottages, etc.

Architects S. B. Eisendrath & Co. are getting out plans for twenty frame dwellings — in the Colonial style of architecture, to cost $40,000, to be built at Englewood.

Architect Perley Hale: For Mr. Liphard, a four-story and flat building, to cost $12,000; Arcadian brownstone front, mantels, bathrooms, closets, etc.; making plans. For Hand & Worrell, a three-story store and flat building, to be built at Seventy-ninth and Dickey streets, bathrooms, mantels, etc.; cost $25,000.

Architect Oscar Cobb: For the Citizens' Music Hall Association, at Canton, Ohio, a four-story music hall and business block, size 80 by 136 feet, to cost $40,000; pressed brick, terra-cotta and stone front, steam heat, electric light, etc.; finishing plans.

Architects W. A. Youmans & Co.: For Mr. Kern, a block of stores, to cost $10,000; making plans. For F. W. Parks, a two-story dwelling, to be built of tile, on Millard avenue; furnace, bathroom, mantels, etc.; making plans.

Architect F. B. Townsend: For A. Farrar, a two-story factory, 75 by 100 feet, cost $15,000; steam heat, etc.; preparing plans.

Architect J. C. Swalm is working on plans for a cut stone front residence, to be built opposite Lincoln Park; hot water heating, bathrooms, mantels, stained and beveled glass, etc., cost $10,000. For W. L. Pitman, at Oak Park, a two-story dwelling; frame, stone basement, furnace, mantels, bathrooms, stained glass, etc.

Architects Ostling Bros.: For Lindahl & Johnson, a four-story and basement flat building, to cost $15,000; Tiffany pressed brick and Bedford stone front; bathrooms, closets, mantels, stained glass; making plans.

Architect R. G. Pentecost: For Cyril B. Smith, two three-story residences. Kilbuck and Michigan green buff stone fronts, furnaces, mantels, bathrooms, beveled and plate glass; cost $25,000; making plans. For N. W. Mixer, a two-story stone front residence, furnace, mantels, bathroom, stained glass, etc.; making plans. For Thomas Kelley, a three-story flat building; Tiffany pressed brick and Bedford stone front, two furnaces, mantels, bathrooms, stained glass, etc.; making plans. Also working on plans for a four-story flat building, to be built on Calumet avenue near Twenty-third street; Anderson pressed brick and Bedford stone front; bathrooms, closets, mantels, stained glass.

Architect J. V. Benes: For Mrs. Schruta, a three-story and basement flat building, to be built on Lexington street near Western avenue; St. Louis pressed brick and Michigan green buff sandstone front; bathroom, closet, stained glass; making plans.

Architect Julius Gittel: For L. A. J. Williams, a two-story dwelling at 1530 Byron street; St. Louis pressed brick, with Connecticut brownstone and metal shingle roof; furnace, mantels, bathroom, stained glass, etc.; making plans. For W. Kniesel, a three-story and basement store and flat building, at southeast corner of Ashland and North avenues; Indiana pressed brick and Lemont stone front.

Architect W. L. B. Jenney: For F. M. Bell and W. J. Dobbins, two handsome stone-front dwellings on Indiana avenue and Forty-sixth street; mantels, bathrooms, hardwood finish, steam heat, etc.; preparing plans.

Architect W. L. Carroll: For S. J. Arats, a four-story store and flat building on Polk street near Clark; St. Louis pressed brick front; bathroom, closets, etc.; making plans. For August W. Ring, a three-story flat building at 336 Belden avenue; Collinsville pressed brick and Bedford stone front; bathrooms, closets, mantels, stained glass; making plans. For Thomas H. Gault, a three-story flat building; Collinsville pressed brick and buff Bedford stone front; bathrooms, mantels, stained glass. Also making plans for a Baptist chapel, to be built on Belden avenue near Halsted street.

Architect John T. Long: Making plans for a M. E. Church, to cost about $13,000, to be built at Stevens Point, Wisconsin; brick and stone, furnace, stained glass, pews, etc.

Architect John Otter: For E. Denniston, a three-story flat building at Lake View; St. Louis pressed brick and Bedford stone, mantels, bathrooms, closets, stained glass; making plans. For D. Ryan, two frame dwellings, at 5428 and 5430 Atlantic avenue; bathrooms, mantels. For A. Hart, a three-story flat building; Bedford stone front, stained glass, bathroom, closets, etc. For Mrs. M. Isakson, a four-story store and flat building on Market street near Oak; St. Louis pressed brick and stone; closets, stained glass, galvanized iron bay.

Architect O. J. Pierce: For Prof. E. O. Exall, a three-story store and flat building, to cost $30,000; northeast corner of Ellis avenue and Forty-fourth street, pressed brick and stone front; bathrooms, closets, mantels, etc.; letting contracts.

Architects Burling & Whitehouse are taking estimates for the Winner building to be erected at Kansas City, Mo. It will be a handsome nine-story office building, 172 by 157 feet in size and cost $800,000; elevators, steam heat, electric light, mail vestibules, etc.; the foundation was put in last year by day-work.

Architects Flanders & Zimmerman: For the Aurora Mercantile Company, a four-story store and office building, 82 by 89 feet: to cost $50,000; to be built at Aurora, Anderson pressed brick, terra-cotta and Lemont stone front, steam heat, electric light, elevators, etc., preparing plans.

Architects Lamson & Newman are taking figures for a four-story store and flat building, 120 by 125 feet; to cost about $100,000; Anderson pressed, mottled brick and brownstone front, bathrooms, closets, mantels, gas fixtures, tiled floors, marble wainscoting, etc.

Architect Theodore Karls: For P. W. Gates' estate, a five-story and basement factory, 149 by 151 feet, and one-story addition to old building on southeast corner of Clinton and Washington streets, fine pressed brick front with terra-cotta trimmings, interior, mill construction, steam heat, electric light, elevators, etc.; cost $125,000; making plans. For H. W. Rockener, a three-story residence at 4231 Indiana avenue, St. Louis pressed brick and Bedford stone, hot water heating, hardwood interior, mantels, bathrooms, jeweled, stained, plate and beveled glass, etc.; getting out plans. For K. G. Schmidt, at Twin Lake, Wis., a two-story and attic frame summer residence; cost $16,000; finishing plans.

Architect F. Foehringer: For William Schmidt, a two-story residence, blue Bedford stone front, hardwood finish, mantels, bathrooms, stained, plate and beveled glass, copper bay and cornice, steam heat, etc.; cost $17,000.

Architect Fred Ahlschlager: For James Irwin, a three-story store and flat building at Fifty-ninth and State streets, St. Louis pressed brick, terra-cotta and stone trimmings, bathrooms, closets, stained glass; making plans. For S. Franklin on Bunker street, a three-story factory, common brick, elevator, etc.; making plans.

Architect Thomas Wing: For John C. Morper, a two-story frame residence, 20 by 66 feet, stone basement, steam heat, mantels, etc.; cost $10,000.

Architect C. C. Mihlcr: For Dr. W. C. Gray, at Oak Park, a two-story frame dwelling, stone basement, furnace, mantels, bathroom, closet, stained glass, etc.; making plans.

Architect J. J. Egan, of 85 Dearborn street, is preparing plans for a Catholic church, to cost about $40,000, to be erected at Des Moines, Iowa; brick and stone, steam heat, stained glass, pews, etc.

Architects Adler & Sullivan are making plans for a Jewish Synagogue, to be built on Indiana avenue near Thirty-seventh street; stone front, steam heat, etc., cost $50,000. For the Crane Manufacturing Co., a five-story factory, 100 by 203 feet, cost $75,000.

Architect W. T. Lesher: For Anderson Brothers, fifty two-story dwellings, to be built on Dickey avenue west of Sheridan, Humboldt Park; Indiana pressed brick, with Bedford and Bayfield stone trimmings; bathrooms, closets, mantels, etc.

Architect M. L. Beers: For Trustees, A. N. Halloway, President, Lebanon, Ind., a two-story and high basement school, to cost $20,000; pressed brick and stone, Georgia pine finish, two furnaces, etc.

Architect Wesley A. Arnold is making plans for four frame dwellings, to cost about $20,000, to be erected at Evanston; stone basements, furnaces, bathrooms, closets, mantels, stained glass.

Architect Clinton J. Warren: For J. P. Odell, a seven-story apartment house, 50 by 90 feet; cost $75,000; pressed brick, terra-cotta and stone with brick bays, two elevators, steam heat, marble wainscoting, tiled floors, plate and beveled glass, etc.; making plans. For J. F. Keeney, remodeling two houses into a seven-story apartment building, corner of Ohio and Rush; two fronts of pressed brick,

terra-cotta and stone, two elevators, steam heat, dumb waiters, mantels, tiled floors, marble wainscoting and all the improvements will be required; size 50 by 125 feet; cost $80,000; preparing plans.

Architect H. B. Wheelock: Making plans for Post Graduate Medical College, to cost $25,000, to be built on Third avenue near Van Buren street; pressed brick, terra-cotta and stone front, steam heat, electric light, elevator, mantels, batbrooms, etc. For E. G. Pike, a three-story flat building; pressed brick and stone, bathroom, closet, mantels, etc.

Architects Patton & Fisher: For W. J. Johnson, at Hinsdale, a two-story frame residence; hardwood trimmed, hot water heating, bathrooms, mantels, etc., cost $10,000. For James W. Scoville, at Oak Park, a three-story store, office and society hall building, size 96 by 194 feet, to cost $125,000; steam heat, hardwood finish, iron beams and columns, tile floors and partitions, to be strictly fireproof; making plans, and work will be commenced this spring.

Architect E. D. Martin: For I. McK. Hull, at Jackson, Mich.; a two-story old Colonial style frame residence; stone basement, hardwood trimmed, wood mantels, bathroom, closet, steam heat, etc.

Architect Julius Speyer: Making plans for a four-story flat building, 125 by 100 feet, cost $70,000, to be built on Twenty-ninth street; pressed brick and stone, bathrooms, closets, mantels, stained glass, etc. Also making plans for a four-story hotel, size 60 by 125 feet, to cost $50,000; pressed brick and stone front, steam heat, elevators, hardwood finish, galvanized iron bays, marble wainscoting, restaurant, bar, billiard room, etc.

Architects I. K. & A. B. Pond: For Ashley Pond, a four-story store and flat building, size 25 by 80 feet, cost $10,000; Grape Creek Roman brick with Prentice stone trimmings, bathrooms, closets, mantels, etc.

Architects Wm. A. Youmans & Co.: Making plans for the People's Church, to be built corner of Milwaukee avenue and Ashland; steam heat, 2,600 opera chairs, electric light, stained glass, etc.; cost about $50,000.

Architects Ostling Brothers: For John Bygren, a four-story and basement flat building, at 146 Sedgwick street; Bedford stone front, bathrooms, closets, mantels, stained glass; cost $10,000.

Architect Oscar Cobb: For H. E. Bucklen, a six-story addition, 76 by 64 feet, cost $25,000, corner Michigan avenue and Peck Court; pressed brick and Bedford stone, iron working throughout, hollow tile, stone sidewalks, steam heat, elevators, etc.

Architects Howe & Shelton: Making plans for a three-story and basement club house, size 25 by 90 feet, cost $15,000, Washington boulevard near Hoyne; pressed brick and stone, steam heat, bathrooms, closets, bowling alley, gymnasium, billiard room, etc.

Architects J. M. Van Osdel & Son are making plans for a five-story, basement and attic building to be erected in the rear of the Woman's Christian Association building on Michigan avenue and Peck Court. The present frame building will be brick veneered, and used as a dining room, kitchen and work department for the permanent building. Steam heat, elevators, the modern conveniences, etc., will be put in. The cost will be about $25,000. Architects Van Osdel & Son are making plans for the rebuilding of the J. V. & C. B. Farwell building, recently burned; Anderson pressed brick, steam heat, etc.; cost about $15,000.

Architect C. A. Weary: For J. L. Campbell, eight two-story dwellings, corner Adams and Western avenue; pressed brick and stone, furnaces, mantels, bathrooms, closets, etc.; cost $32,000.

Architect O. W. Marble: For Mr. Mullen, a two-story frame residence at Woodlawn; furnace, mantels, stained and beveled glass, etc. For W. H. Thomas & Sons, a four-story apartment house; cost $80,000; on University place; St. Louis pressed brick, terra-cotta and stone; bathrooms, mantels, stained glass, etc.; making plans.

Architects Burnham & Root: For Dudley, Winston, et al., an eight-story office and theater building, southwest corner of Michigan avenue and Madison street; fireproof, elevators, electric light, etc.; preparing plans.

Architect J. H. Wagner: For B. P. Morgan, making plans for remodeling Portland block; marble wainscoting, tile floors, iron stairways; will make hall floor on level with sidewalk, etc.; cost $30,000.

Architects Faber & Pagels: For Mr. Dusek, corner of Allport avenue and Eighteenth street, a four-story store, flat and theater building, 100 by 125 feet; cost $80,000. Two fronts of blue Bedford stone; steam heat, electric light, etc.; preparing plans.

Architect L. G. Hallberg: For A. Wisner, a four-story apartment house; $30,000; pressed brick and stone; making plans.

**Cincinnati, Ohio.**—Reported by Lawrence Mendenhall: The reorganization of our Builders' Exchange is now an assured fact, and let us hope that it will insure increased usefulness and bind more strongly together the different trades, and that from the ruins of the old body may rise a glorious new, and that the ultimate aim, that of a manual training school, may be fully realized.

The biggest job on hand now, in more ways than one, is the eleven-story building to be erected by the Neave heirs. I think it will prove the opening wedge for more improvements of the same sort. A fire would be a first-class blessing to our city, architecturally, as it was to Chicago. Let us expect great things from the younger generation, for our old "money bags" (no insult intended) are entirely too self-satisfied, and with a comfortable income, find the lap of luxury extremely pleasant. I can even name corners now occupied by buildings which, in these days, would hardly do credit to country towns. For a city of her size and wealth—I, as a native, am ashamed to own it—Cincinnati has about as few buildings to which she can point with pride, that I know of. Gentlemen, wake up from your Rip Van Winkle sleep, and help transform your city of Falling Water into a grand metropolis, but when you do be sure to patronize home architects, as well as, when possible, home manufacturers and labor. The Strong Locomotive Works will locate here; another large pipe foundry as well as cotton factory. These are harbingers of prosperity and on the principle that whatever affects the common good in progressing, is worthy of encouragement. I know that Cincinnati's rivals will wish her God speed, and not "may the devil take him, etc." All the architects report "good prospects" and feel encouraged over the outlook.

Architects S. Hannaford & Sons: For Charles Gunckel, Esq., Middletown, Ohio, remodeling residence, materials, stone, stained glass, hardwood finish, tiling, wood mantels, electric work, etc. For James M. Glenn, Esq., Cincinnati, a seven-story store and office building, slow-burning construction, tin roof, hydraulic elevators, brick machinery, etc. For W. H. Alms, of Alms & Doepke Company, two houses, materials, brick, slate roof, furnaces, mantels, hardwood, electric work, stained glass, etc. For Edward P. Harrison, care L. B. Harrison, First National Bank, and others. Cincinnati, a large cotton mill, 66 by 200 feet, three stories high, materials, brick, steam heat and elevators, tin roof, slow-burning construction, machinery, etc.; address architect.

Architect S. E. DesJardins: For Mr. Alfred White, 255 Fifth street, a residence; materials, brick, cypress shingles, hardwood, furnace, stained glass, electric bells, slate roof, tiling, etc.; cost $6,000; he reports prospects good.

Architect W. W. Franklin: For Mr. Lawrence Peppard, 651 Gilbert avenue, a residence; material, brick, slate roof, plumbing, blinds, iron mantels, pine finish, etc.; cost $6,000. For W. C. Bates, a residence; materials, pressed brick, hardwood, furnace, wood mantels, plumbing, stained glass, blinds, etc.; cost $9,000. For Dr. R. H. Weatherhead, Sixth and Vine, three dwellings; materials, frame and shingles, pine finish, blinds, wood mantels, plumbing, stained glass, tin roof, etc.; cost $10,000.

Architect G. W. Drach: For Mr. Wm. Beck, Vine near Seventh, a residence; materials, frame, slate roof, tiling, laundry fixtures, hardwood mantels, electric bells, furnace, etc.; cost $4,500; prospects good.

Arcbitect Adam Bast: For Mr. Gottlieb Muhlhauser, a flat building; materials, brick, terra-cotta, tin roof, pine finish, dumb waiters, laundry fixtures, iron mantels, electric bells, etc.; cost about $20,000; busy on sketches.

Hermann Lackman, Esq., Sixth near Mill street, will build a large storage warehouse for brewery purposes, 57 by 88; material, brick, iron and stone; write for information.

Architect George W. Rapp: For J. W. Utter, Esq., a building; materials, brick, slate roof, pine finish, blinds, wood mantels, furnace, laundry fixtures, plumbing, etc; cost $7,000. Mr. Rapp has lately opened a new and more convenient office, having returned from Europe a short time since. His prospects are good for a busy season.

Architect S. S. Godley: For Charles Fleischman, Esq., a store and flat building, seven stories high; materials, stone, tin roof, passenger and freight elevators, steam heating, stained glass, marble tiling, slate mantels, etc.; cost $45,000; address architect. For Julius Freiberg, Esq., two double residences; materials, brick, wood mantels, furnaces, stained glass, plumbing, pine finish, tin roof, etc.; cost $15,000; prospects good.

Architect John H. Ball: For Dr. Oscar Campbell, Erlanger, Ky., a residence; materials, frame and shingles, hardwood finish, blinds, hardwood mantels, slate roof, etc.; cost $7,000.

**Cleveland, Ohio.**—The condition is very fair now, and a large amount of building seems evident for this spring.

Architect A. M. Smith: For Helen M. Bradley, a three-story flat building, size 16 by 28 feet, brick and stone; cost $11,000.

Architect G. Schwabe: For A. Hartz, a two-story frame dwelling, size 26 by 49 feet; cost $4,500.

Architect John Eiseman: For George O. Ensign, a two-story frame dwelling, size 38 by 48 feet; cost $8,000.

Architects Lehman & Smith: For J. F. Troyan, three-story store and dwelling, size 67 by 79 feet, brick; cost $12,000.

Architect Vincent E. Gregg: For Kimbale Est, a four-story manufacturing building, size 96 by 58 feet, brick and stone; cost $12,000.

Architect George F. Hammond: For H. A. Everett, a two-story dwelling, size 48 by 44 feet, brick and stone; cost $10,000.

Architects names not reported: For the Cleveland Storage Company, a two-story store house, size 47 by 200 feet, brick; cost $12,000. For E. A. Coss, a two-story frame dwelling, size 27 by 44 feet; cost $5,000. For L. M. Southern, two two-story frame dwellings, size 26 by 42 feet each; cost $8,400.

**Denver, Colo.**—Architect Fred A. Hale: For the Commercial Bank, Salt Lake City, Utah, a five-story stone bank and office building, 80 by 96 feet; will cost about $100,000. For the University of Colorado, a dormitory building of stone, three stories and basement; will cost $25,000. Also for same, an addition to the ladies' dormitory building, to cost $5,000. For Dr. J. B. Corry, residence and stable, to cost $6,000.

Architects F. C. Edbrooke & Co: For the Catholic cathedral, a school building, to cost $50,000. For Adolph J. Zang, a business building, to cost $25,000. For a syndicate, a hotel building, to cost $90,000. For A. J. Vivian, a terrace, to cost $20,000.

Architects Balcomb & Rice: For E. W. Ray, a stone and brick residence, to cost $10,000. For H. W. Tallant, a stone residence, to cost $9,000; a double residence, to cost $14,000. For H. W. Tallant, a double dwelling, to cost $11,000. For F. E. Adams, dwelling, brick and stone, to cost $8,000. For A. E. Gibson, dwelling, brick and stone, to cost $8,000. For A. Gustafsen, a brick and stone store building, to cost $8,000. For W. H. Beeson, a brick dwelling, to cost $5,000. For W. H. Parker, residence, brick, to cost $7,000.

Architect John J. Huddart: For George Tritch, a five-story stone store and office building, 75 by 125 feet; will cost $100,000. For S. St. Clair, three dwellings, frame, to cost $18,000. For Charles H. Smith, a brown sandstone front terrace, to cost $50,000. For A. L. Parsons, an apartment house of brick and redstone, to cost $20,000. For Cole Lydon, a brick dwelling; cost $6,000.

Architect William Quayle: For School District No. 17, a two-story stone and brick school building, to cost $35,000. For Louis Mack, a stone business building, to cost $140,000. For Otto Sauer, brick and stone dwelling, to cost $12,000. For Aspen, Pitkin county, Colorado, a two-story and basement brick and stone court house, to cost $60,000. For Louis and Jacob Mack, a stone and brick residence, to cost $17,000. For George Schmidt, a dwelling, to cost $12,000.

Architects Andrews, Jaques & Rantoul: For S. V. Farnum, a stone and brick residence, to cost $22,000. For Dr. Edmund J. A. Rogers, a stone and brick residence, to cost $25,000. For John H. Blood, dwelling and barn, pressed brick, to cost $20,000. For E. F. Bishop, two-story brick business building, to cost $15,000.

Architects Lee & Liden; For John Elitch, an amphitheater, frame, to cost $12,000. For Isaac E. Blake, a brick store and office building, to cost $35,000. For C. H. Lee, a dwelling, to cost $3,000. For J. Fay, alterations to dwelling, to cost $2,000.

Architect F. C. Eberly: For John Melheim, a business building, to cost $90,000. For Denver Brewing Company, a brick storage building, to cost $9,000. For John Rogers, a brick and stone dwelling, to cost $8,000.

Architect F. Goodnow: For R. T. Boot, residence, to cost $10,000; for H. G. Shaeffer, residence, to cost $9,000; for Mrs. A. C. Kingsley, residence, cost $5,000.

**Detroit, Mich.**—Building is dull just at present, but outlook good, although many are holding back on account of the unsettled condition of the labor market.

Architects M. L. Smith & Sons: For Maxwell M. Fisher, pressed brick and stone residence; cost $20,000; also for William L. Barclay, a brick and stone residence; cost $12,000.

Architect A. C. Varney: For Henry Leonard, two-story brick and stone dwelling, slate roof, size 48 by 63 feet; cost $8,000. For Leopold Nate, a two-story brick dwelling, slate roof, size 36 by 45 feet; cost $6,000. Also for H. S. Kinney, two-story brick dwelling, size 32 by 39 feet; cost $3,500.

Architects Rill & Oldfield: For Henry W. Holcomb, a two-story frame dwelling, size 22 by 56 feet; cost $6,000.

Architect Brooks of Chicago: For Detroit Pitcher Co., four-story brick store, size 30 by 100 feet; cost $13,000.

Architects Spier & Robins: For William E. Henze, two-story frame residence; cost $3,000.

Arcbitects names not reported: For Hugh S. Peoples, four two-story brick stores; cost $13,000. For R. Hilson, two-story frame dwelling, shingle roof; cost $1,000. For Teakle & Golden, two-story brick carpenters' shop, size 50 by 40 feet; cost $4,000.

**Dubuque, Iowa.**—Architect F. D. Hyde: For Messrs. Kimball & Champ, of Council Bluffs, six-story hotel building, size 90 by 100 feet, brick and stone, composition roof, steam heat; cost $150,000. For the Eldora Hotel Company, Eldora, a three-story hotel building, size 36 by 82 feet, brick, iron roof and steam heat; cost $15,000. For. C. K. Berg, of Cresco, a two-story and basement office building, size 26 by 64 feet, pressed brick, tin roof and steam heat; cost $6,000. Also making plans for A. A. Cooper, of Dubuque, a five-story brick factory building, size 64 by 72 feet, and for B. L. Richards, of Rock Rapids, a two-story bank and store building, size 40 by 60 feet.

**Jersey City, N. J.**—Mr. N. R. Marvin, 77 Linden avenue, will erect a handsome residence on Linden avenue, which is to have all the latest improvements; work to begin at once.

**Kearney, Neb.**—Architects Frank & Bailey: For the Kearney National Bank, stone and brick block, containing opera house, banking rooms, offices and stores; cost $100,000. Two new school buildings will be erected here this year at a cost of about $50,000.

**Little Rock, Ark.**—Architect Fred J. H. Rickon: For A. F. Adams, a two-story frame residence, size 50 by 70 feet; cost $4,000. For W. B. Ferguson, a two-story frame residence, size 55 by 80 feet; cost $4,500. For W. S. Holt, a two-story frame residence; cost $2,500.

**Omaha, Neb.**—Architect Henry Voss has plans for wbolesale warehouse, pressed brick with granite trimmings; cost $80,000.

Architect I. Hodgson: For O. N. Ramsey, a brick and stone residence; cost $15,000. Arrangements are being made for the erection of an opera house, size 88 by 152 feet, and five stories high.

**Pittsburgh, Pa.**—Our architects as a rule are very busy. The majority have as much work as they can do. In two or three weeks a large number of contracts will be awarded. If one-half the work now on the boards is completed, 1890 will be a great building year.

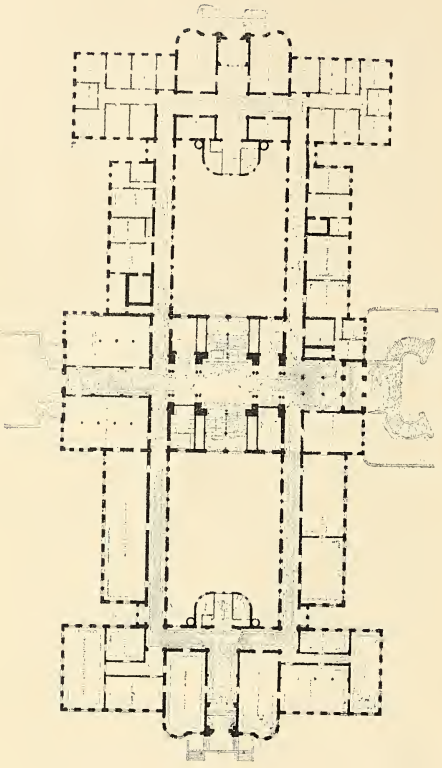
Architect W. S. Fraser: For Arbuthnot, Stephenson & Co., an eight-story building, brick, with stone trimmings; cost $175,000.

Architects Alston & Heckert have completed plans for the Nations' Bank for Savings; three stories high, pressed brick.

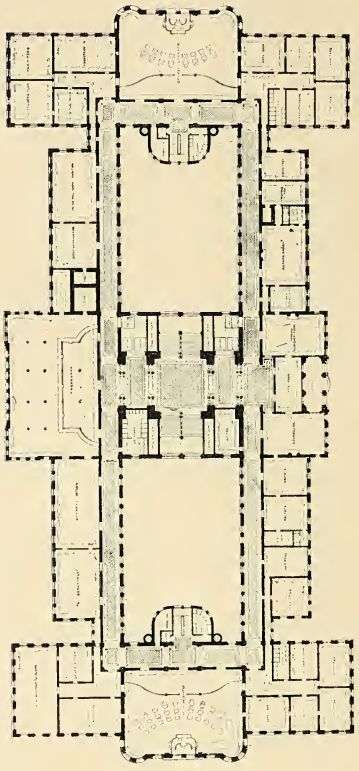
Architect T. C. Sauer: For Dr. W. H. Hitzrot, a large stone dwelling, with all modern conveniences.

Architects Hodgdon & Thomas: For Mr. Henry Davis, a four-story brick apartment house upon the most approved Eastern plans; cost $18,000.

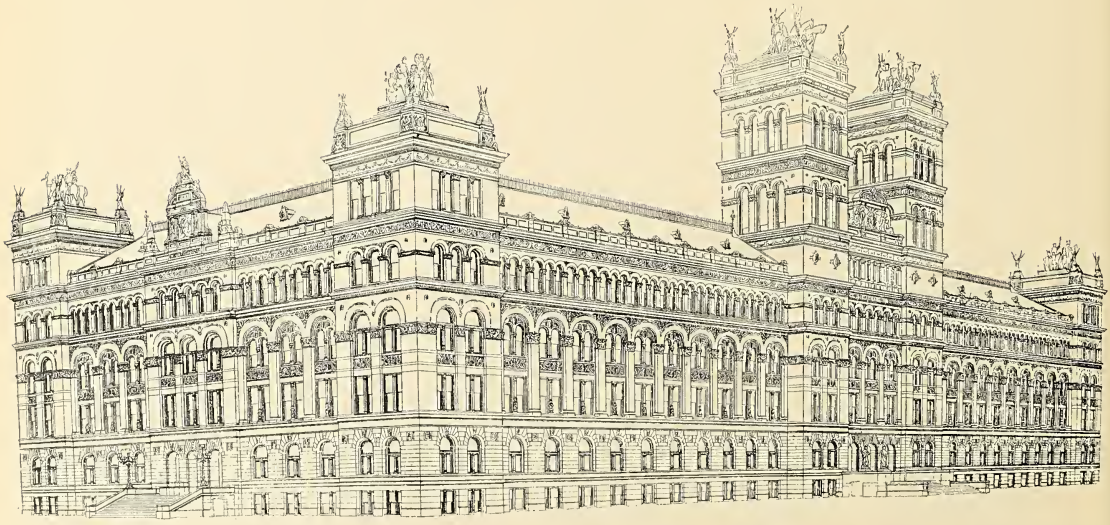
**Seattle, W. T.**—Work will soon be commenced on the following: A $50,000 power house for the Seattle Steam Heat and Power Company; a $5,000 school house; a Catholic church cost $100,000, and an Episcopal church to cost about $30,000.



"CIVIC" FIRST FLOOR PLAN.

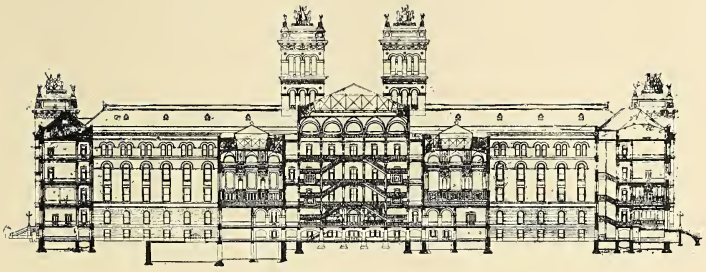


"CIVIC" SECOND FLOOR PLAN.

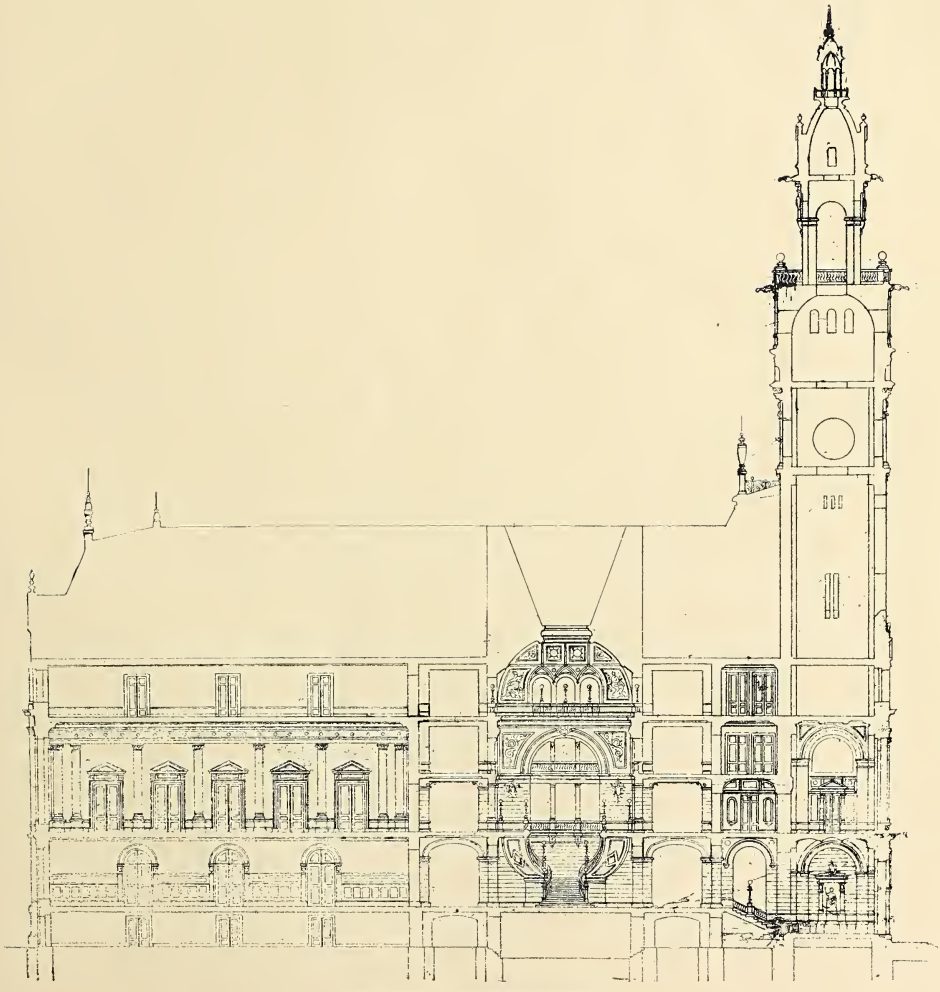


"CIVIC" FOURTH PRIZE DESIGN FOR CITY HALL, ST. LOUIS, MO.

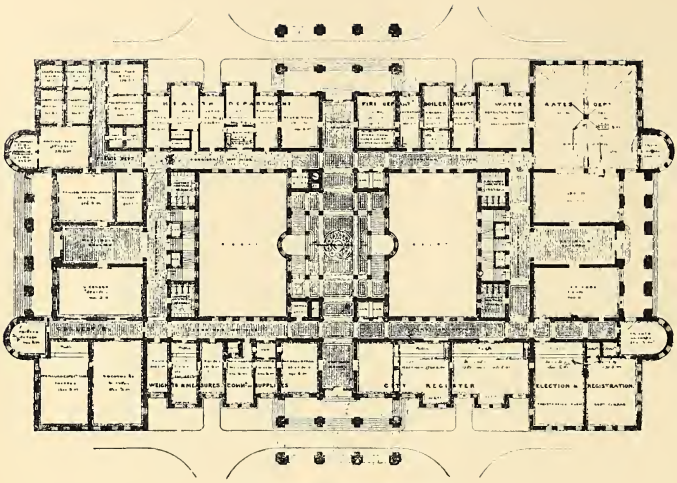
E. F. FASSETT AND A. J. RUSSELL, ARCHITECTS, KANSAS CITY, MO.



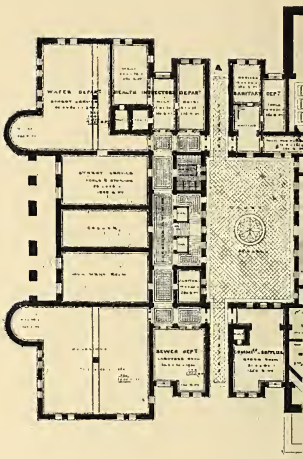
"CIVIC" TRANSVERSE SECTION.



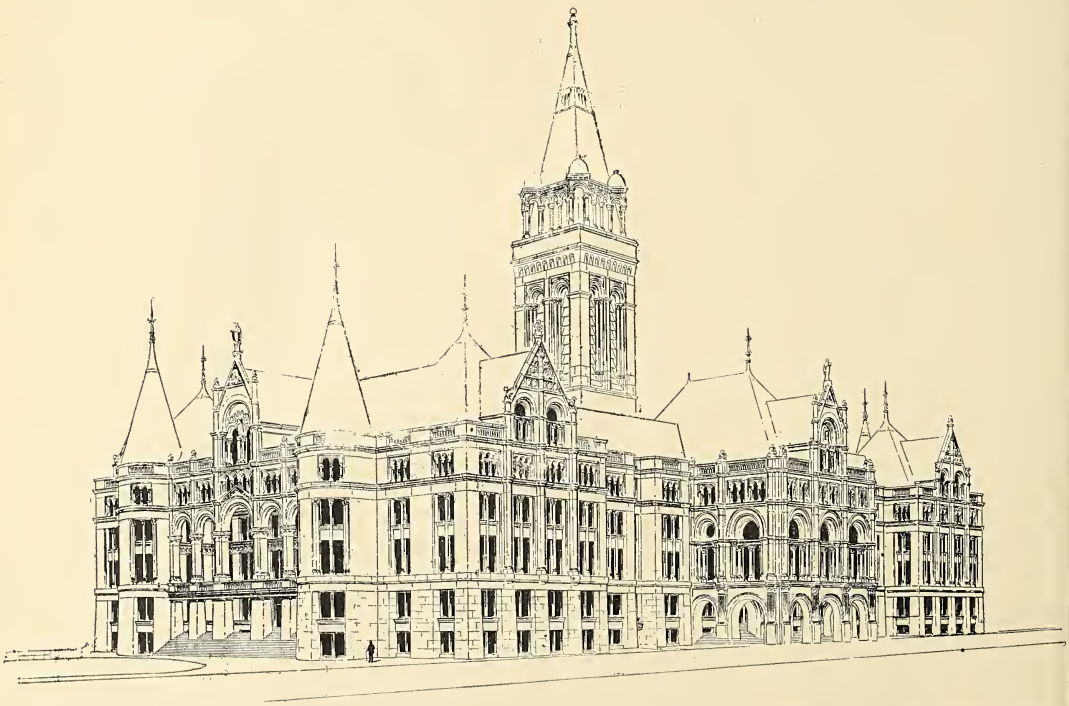
"PRO PATRIA" TRANSVERSE SECTION.



"UNITY" FIRST FLOOR PLAN.

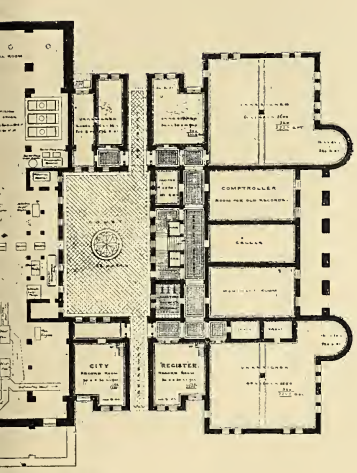


"UNIT



"UNITY," SIXTH PRIZE DESIG

JAMES & JAME




BASEMENT PLAN.



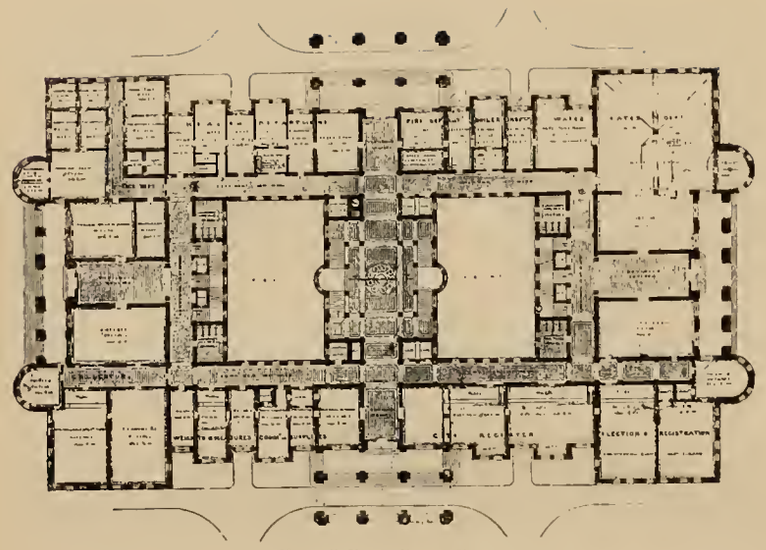
"UNITY" TRANSVERSE SECTION.



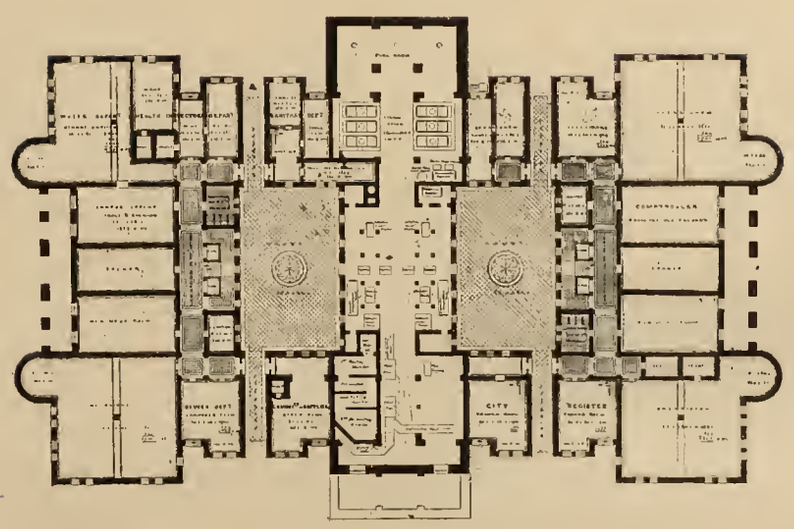
"UNITY" REAR ELEVATION.

FOR CITY HALL, ST. LOUIS, MO.

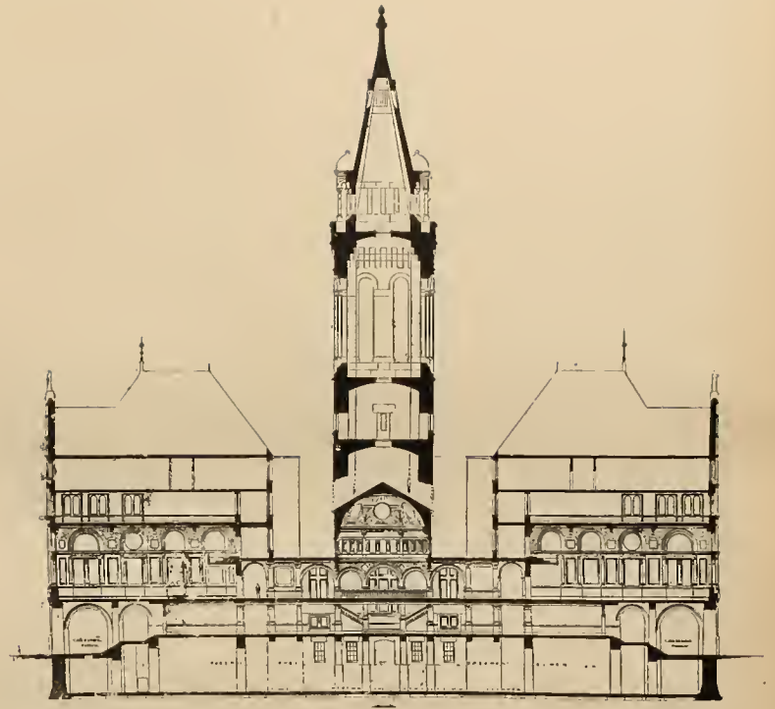
RCHITECTS, NEW YORK.



"Unity" First Floor Plan.



"Unity" Basement Plan.



"Unity" Transverse Section.

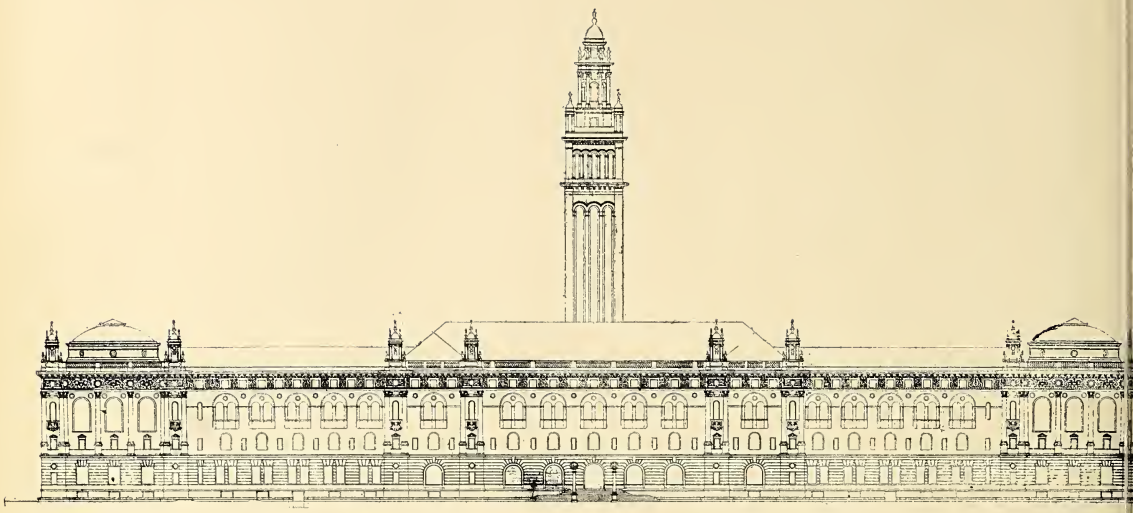




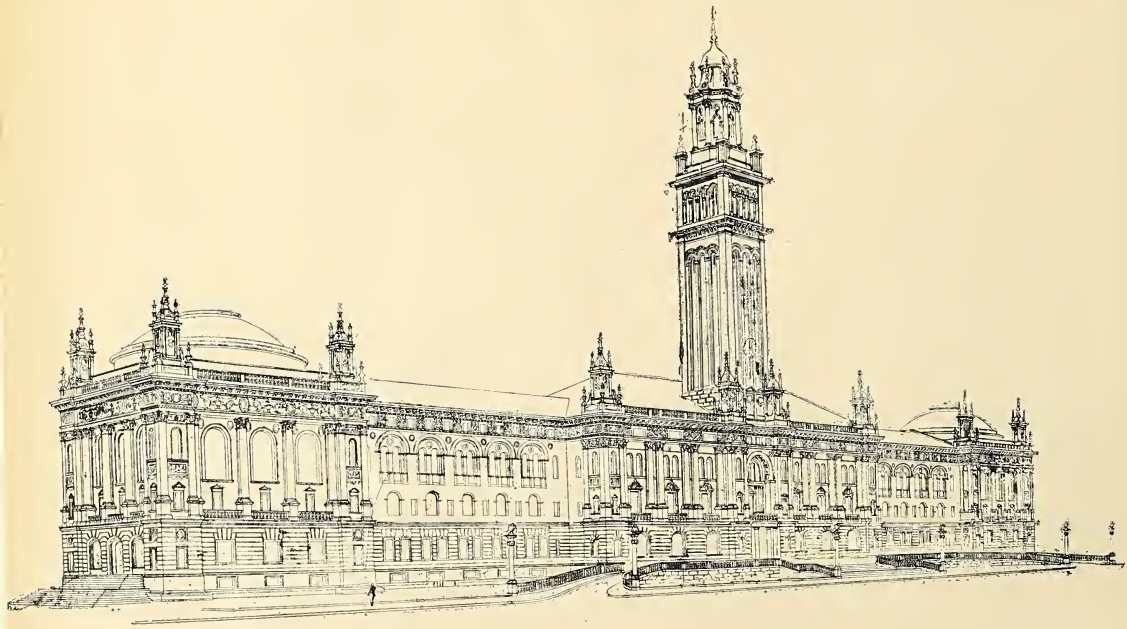
"Unity" Rear Elevation.

"UNITY," SIXTH PRIZE DESIGN FOR CITY HALL, ST. LOUIS, MO.

James & James, Architects, New York.

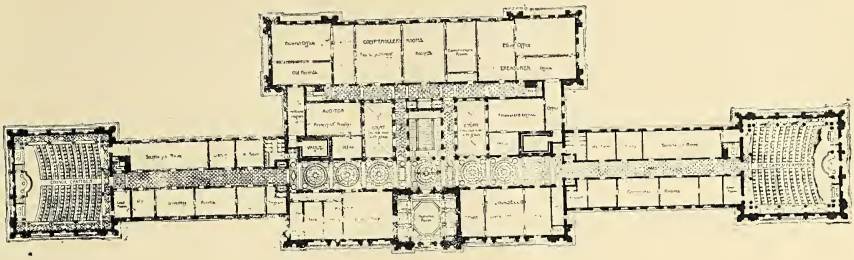


"FAITH" REAR ELEVATION.

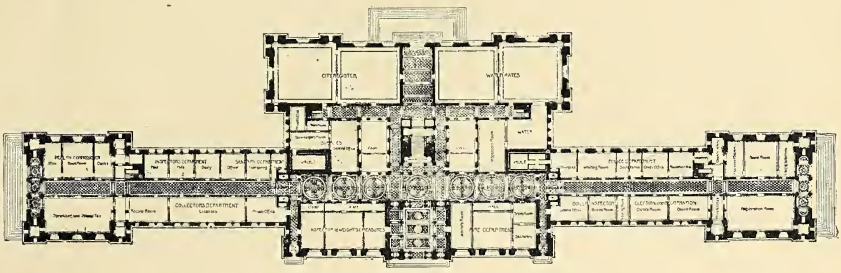


"FAITH" THIRD PRIZE DESIGN FOR CITY HALL, ST. LOUIS, MO.

BY CARRERE & HASTINGS, ARCHITECTS, NEW YORK.



"Faith" Second Floor Plan.

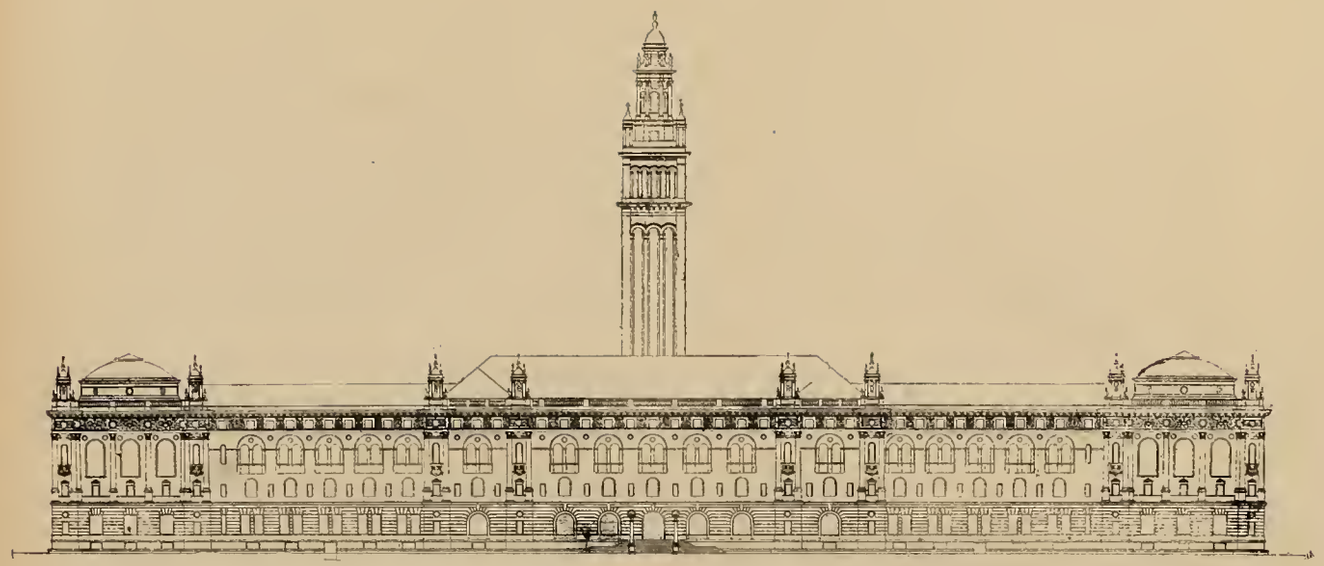


"Faith" First Floor Plan.

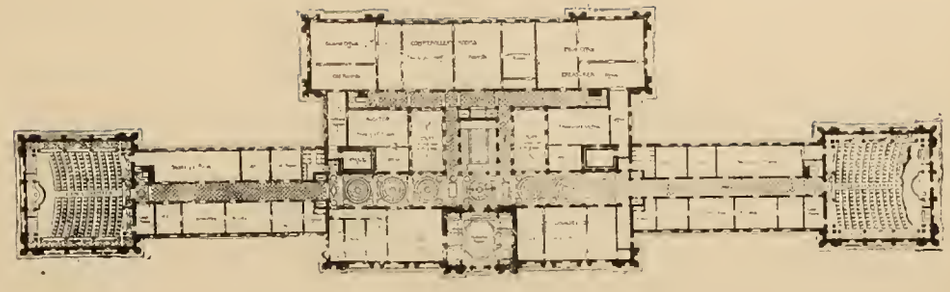


"STAR AND CRESCENT" FIFTH PRIZE DESIGN FOR CITY HALL, ST. LOUIS, MO.

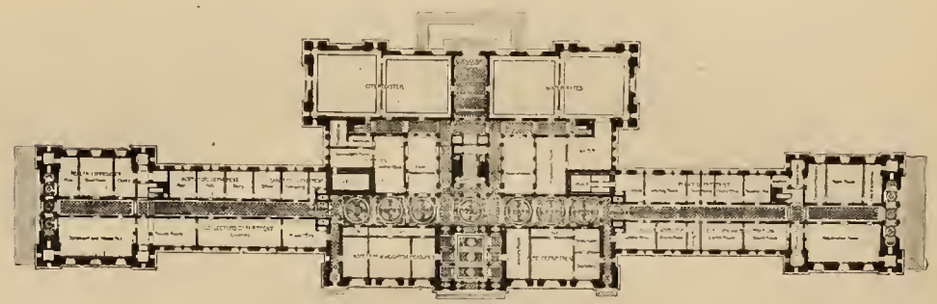
W. H. Dennis, Architect, Minneapolis, Minn.



"FAITH" REAR ELEVATION.



"FAITH" SECOND FLOOR PLAN.



"FAITH" FIRST FLOOR PLAN.



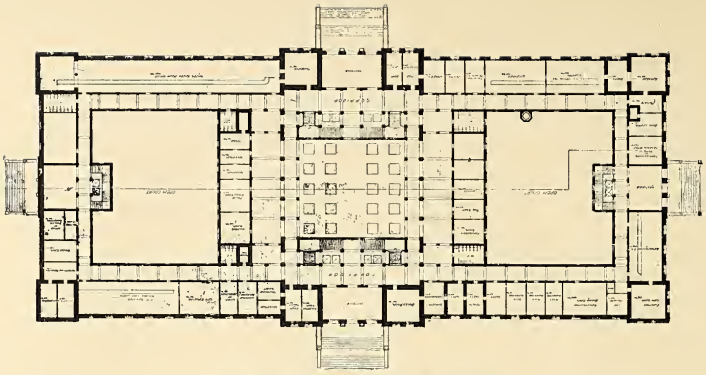
"FAITH" THIRD PRIZE DESIGN FOR CITY HALL, ST. LOUIS, MO.

BY CARRERE & HASTINGS, ARCHITECTS, NEW YORK.

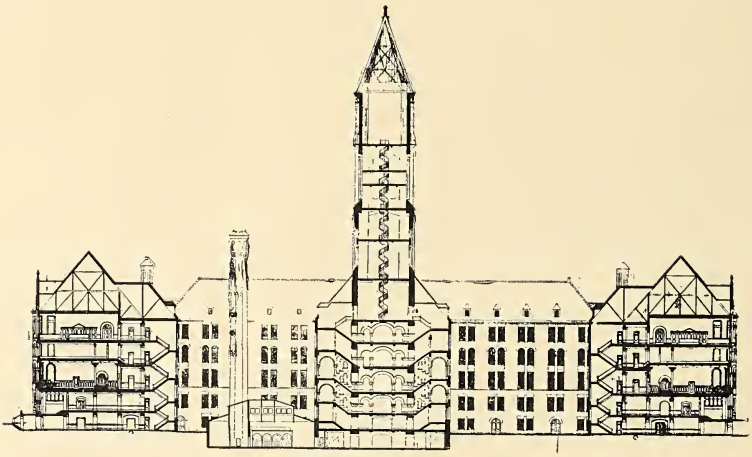


"STAR AND CRESCENT" FIFTH PRIZE DESIGN FOR CITY HALL, ST. LOUIS, MO.

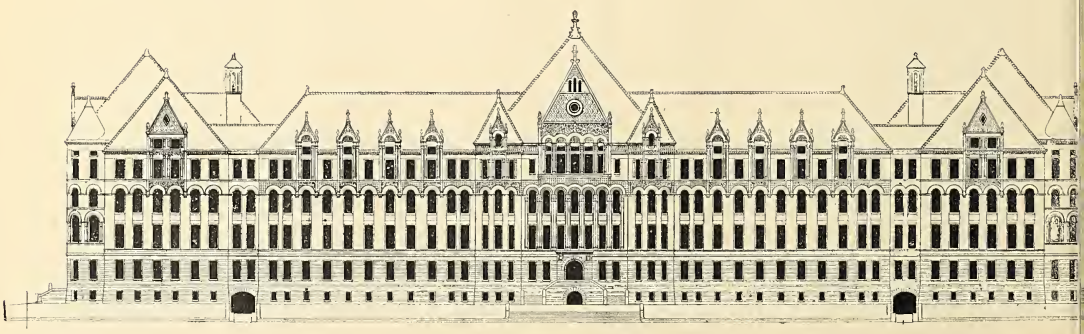
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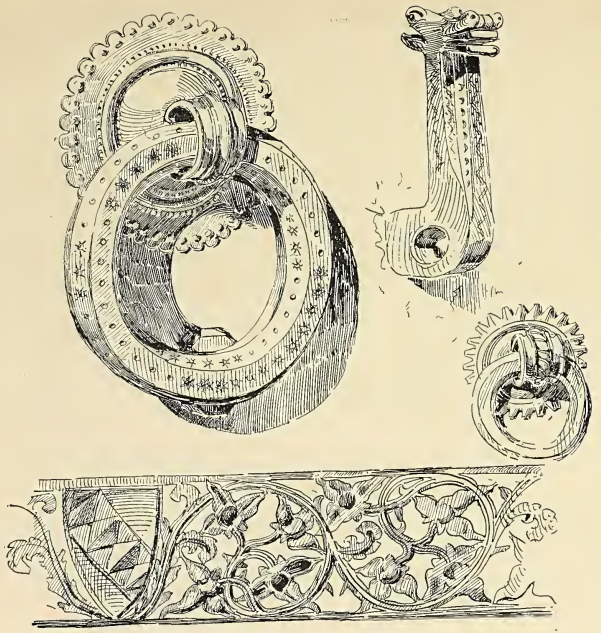
"Star and Crescent" First Floor Plan.

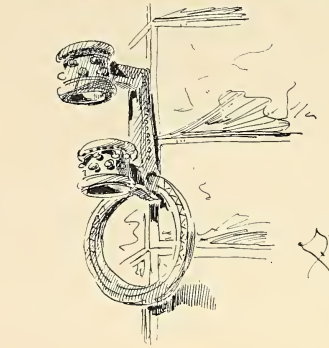


"Star and Crescent" Transverse Section.



"Star and Crescent" Rear Elevation.





FIORENTINE

IRON

WORK

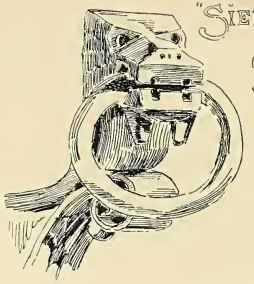
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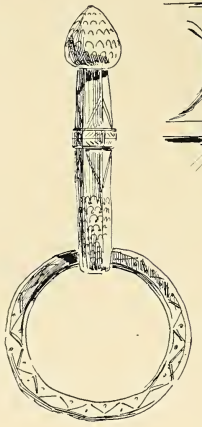
HEAD ON BRAZIER

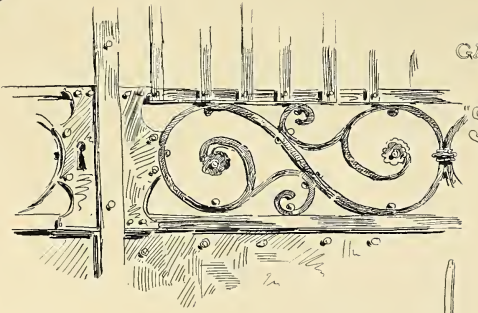
"SIENA"

IN HOUSE

OF ST CATHERINE







GATE

"SIENA"

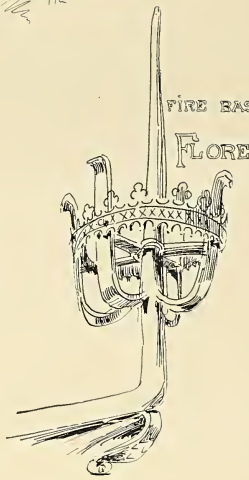
DEL:

ITALIAN

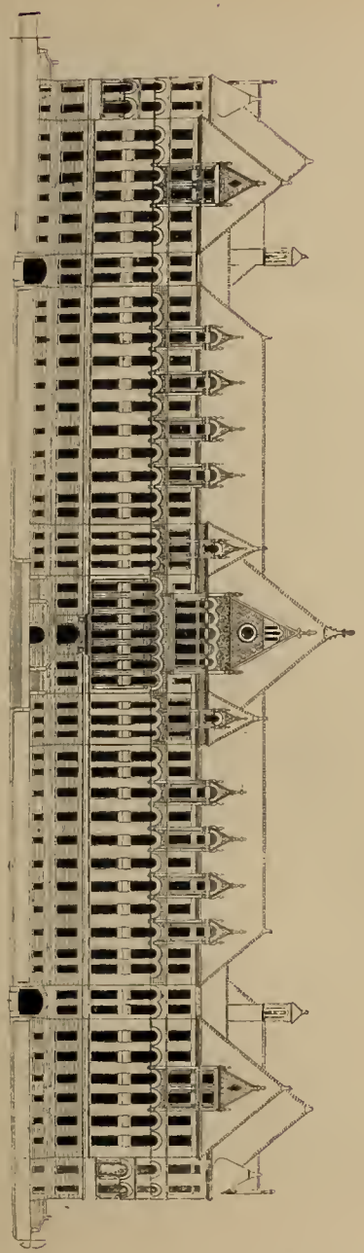
IRON WORK

FIRE BASKET

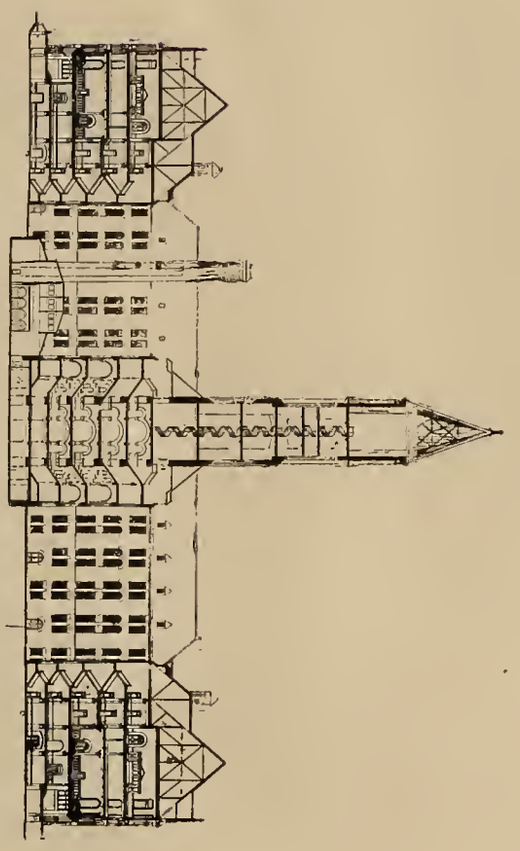
FLORENCE



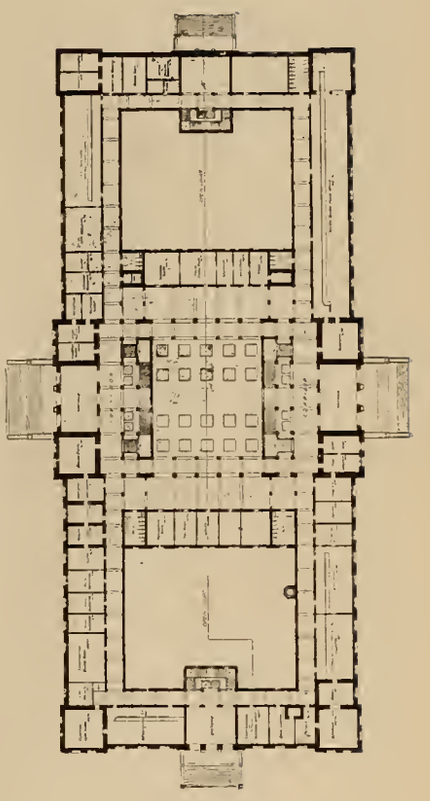
SKETCHED FROM THE OBJECTS BY LUCIAN F. PLYMPTON, CINCINNATI.



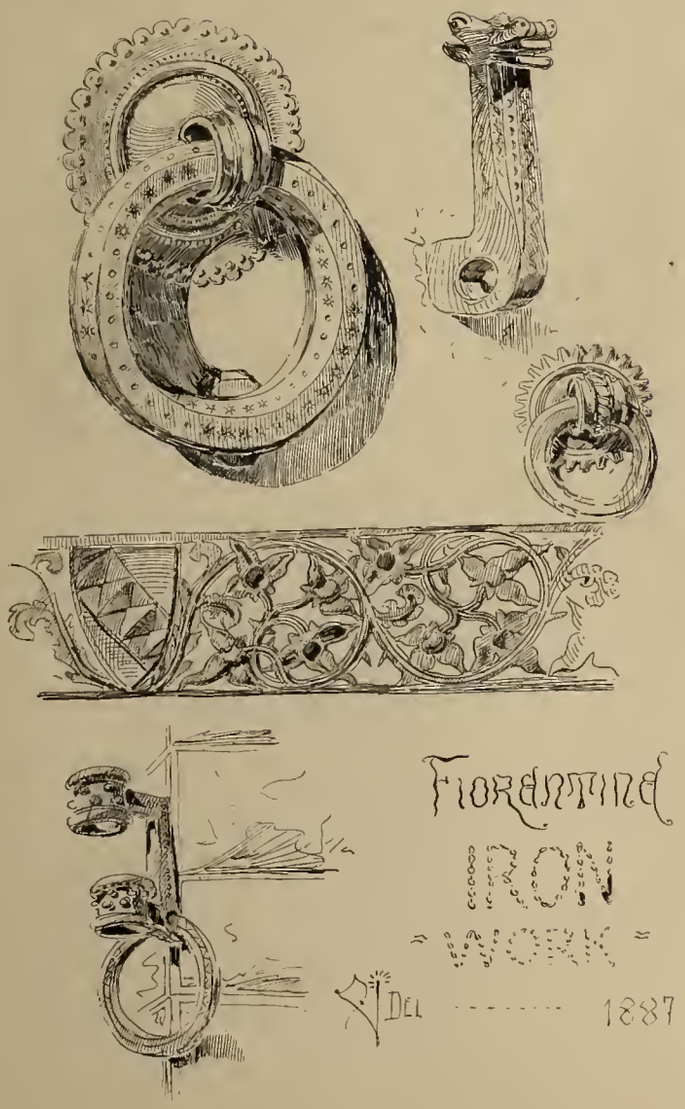
"STAR AND CRESCENT" REAR ELEVATION.

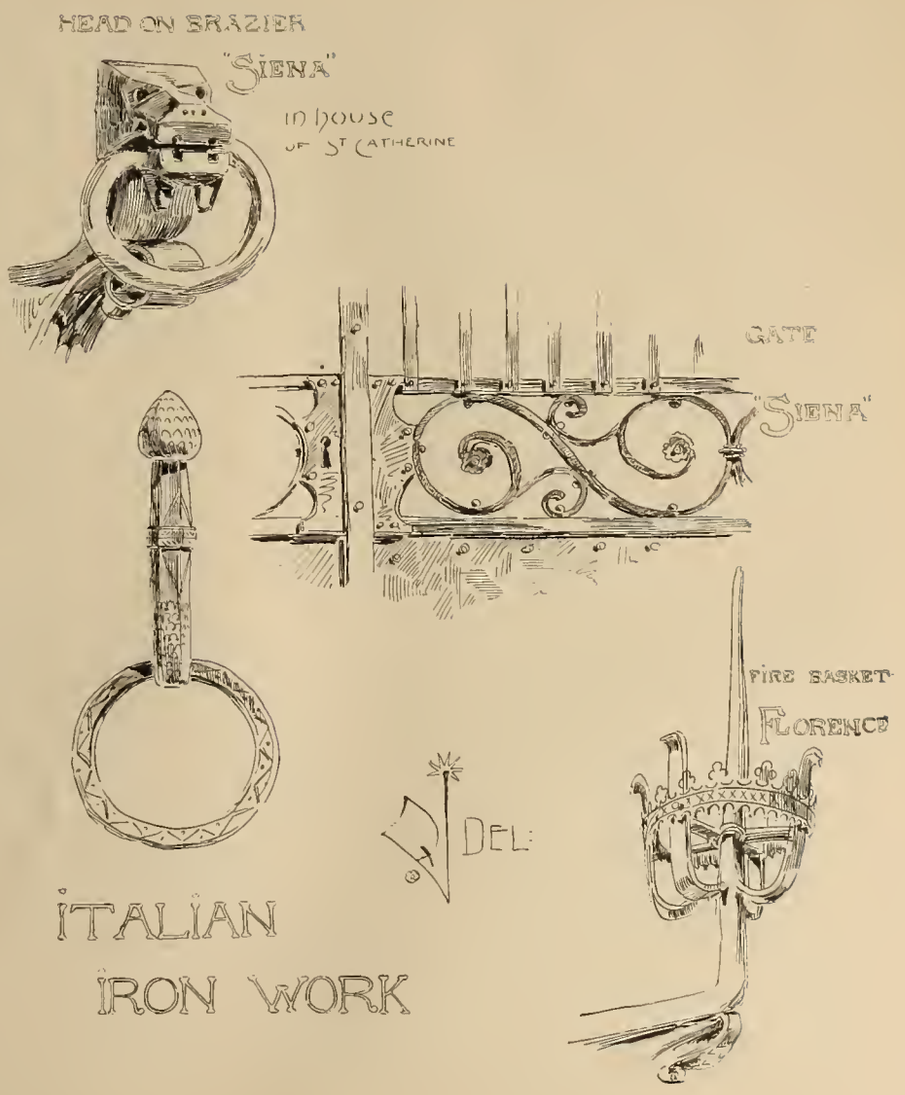


"STAR AND CRESCENT" TRANSVERSE SECTION.



"STAR AND CRESCENT" FIRST FLOOR PLAN.




SKETCHED FROM THE OBJECTS BY LUCIAN F. PLYMPTON, CINCINNATI.

# THE INLAND ARCHITECT AND NEWS RECORD

Vol. XV. APRIL, 1890. No. 3


APRIL, 1890.


## THE INLAND ARCHITECT
AND NEWS RECORD.

*A Monthly Journal (with an Intermediate News Number) Devoted to*

ARCHITECTURE,

CONSTRUCTION, DECORATION AND FURNISHING

IN THE WEST.

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Death of Architect Thomas Walsh, of St. Louis.

Architect Thomas Walsh, of St. Louis, who has been identified with that city and practiced his profession there for over forty years, died March 24, aged sixty-four years. A large number of the best buildings, both public and private, were erected by him during this period, and his reputation among his professional brethren was of a character that made his name to be spoken with respect, and his death breaks a strong connecting link between old and new St. Louis architecture. Latterly Mr. Walsh was not a member of the American Institute of Architects, but he was one of the first presidents of the old St. Louis Chapter.

An English Registration Bill Protested Against.

The latest developments in the direction of securing a legally professional status for architectural practitioners in Great Britain have placed the matter in a peculiar position. It will be remembered that a bill providing for the registration of architects was introduced in the house of commons and failed to pass; and again in July last the same text under a different title, A Bill for the Registration of Architects, was introduced and now approaches its second reading in the house. As we follow the matter in the *Journal of Proceedings* of the Royal Institute the main objections lie in two points: First, the indefiniteness of the provision that after a certain date "a person shall not be entitled to take or use the title of 'architect,' either alone or in connection with any other word or words, unless he be registered," it being claimed, and the fact is self-evident, that an "architect and surveyor" could drop the first title and continue his practice. Second, the bill, if passed, would at once destroy any professional status the architects in regular practice as such have acquired and compel them to pay a license each year, and allow any surveyor, builder or "jerrybuilder" to practice without even this implied right. It would destroy the fifty years of labor the profession represented by the Royal Institute and affiliated associations have undergone, and at once abrogate the privileges and charters given that body from time to time in recognition of its trustworthiness in the proper regulation of the practice of the profession. In these premises it is not strange that the Royal Institute of British Architects and eight others of the ten allied societies—the Architectural Association, the Royal Institute of the Architects of Ireland, the Bristol Society of Architects, the Glasgow Institute of Architects, the Leicester and Leicestershire Society of Architects, the Manchester Society of Architects, the Birmingham Architectural Association and the Nottingham Architectural Society—should each protest against the bill. It is hoped that the protest will be effectual, for the public good and that of the profession. How so intelligent a people can contemplate such a measure is beyond our comprehension. In America the suggestion that the influence behind the measure might be "the granger vote," if not "boodle," would be the first in explanation, but we understand that the British house of commons is wholly composed of "honorable gentlemen." Whether it is better to be a knave or a fool is an open question, but it is generally believed that the latter condition is the hardest to cure. We in America think it unfortunate that our endeavors in the direction of securing the passage of state laws regulating the profession have met with so little success, but we

have everything to gain and little to lose, while with our English confreres it is directly the reverse. The result of the protest of the architectural societies will be watched with interest and much sympathy by members of the profession everywhere.

**A Business Venture by a Local Chapter.**

A decided innovation upon the accepted province of local chapters of the Institute has been inaugurated by the newly reorganized Illinois Chapter in assuming ownership and control of the Institute of Building Arts at Chicago, an exhibit of building materials for the past five years owned and managed by Mr. H. L. Gay, the procedure of which transfer is given elsewhere in this number. As a wide departure from the unwritten policy heretofore followed, the matter of "going into business" in this way is one with which not only the local chapter but the profession in general is concerned—the chapter from both a business and a professional standpoint, the profession at large with the latter feature alone. The friends of the movement present glowing possibilities in the way of earnings devoted to the furnishing of handsome association rooms, purchase of library, lectures, and some even speaking of the possibility of establishing a laboratory for testing building materials, all of which, if perfected by the hoped for earnings being sufficient, would place the Illinois Chapter at the head of all the local associations in this country. The opponents to the measure give many reasons why the architect should avoid sustaining the relations to the contractor which the ownership of an exhibit of materials would establish, claiming that an implied bias at least might follow. It is also argued that in the business aspect an institution that has been under the control of an energetic manager for five years, whose every effort was to make it a financial success, and at the end was scarcely more than paying expenses, would need a man of phenomenal ability and integrity at its head, as well as supported by an active board of architects, to even sustain a paying basis. How the directors of the American Institute of Architects will look at the matter when the Chapter applies for a charter, and the ultimate outcome of this business venture, will be looked for with considerable interest by the profession. Meanwhile we wish the undertaking success.

**Strikes in the Building Trades in Chicago.**

Chicago is experiencing the first serious disturbance in the building trades since 1886, though at present writing not of so general a nature as then. The plumbers instituted a strike April 1, followed by the carpenters, April 8. The plumbers' strike has been settled by arbitration, the principal dispute being the grading of workmen, though a slight rise in wages was asked for. The carpenters have been trying for years to establish a union, and now, feeling that they are strong enough, using a demand for an eight-hour day with a minimum wage of forty cents an hour, are striking to secure the recognition of their union by the contractors. The situation at present is that all carpenter work in the city and suburbs has stopped. The union has taken into its membership every applicant without regard to his proficiency, and the probable result will be the flooding of the city with carpenters either through advertisement by the contractors or the prospective work involved in construction for the World's Fair. While the union is asking for arbitration, and with seeming justice, it is impossible for the contractors to treat with that organization as at present organized and governed. Intelligent workmen estimate the proportion of carpenters to "lumber-shovers" in the organization to be about thirteen to one hundred, and those who are directing the movement are rather of the professional agitator stamp than capable tradesmen. It is a hopeful sign that workmen are beginning to think, and are writing and talking in advocacy of a grading system that will give all men work at equitable rates of wages; and that a large number have definite plans regarding the proper functions and government of unions, the basis of which contemplates a species of benevolent society and board of examination, composed of a joint committee of the workmen and contractors, for the examination and admission of members. Such a union would be of advantage, not only to its members, but to the contractors, who could abolish that necessary but significant "strike clause" in contracts, and who would hire none but members who had passed examination. It would stimulate the workman to pass successive examinations that he might reach the first grade, and abolish that bane of most unions as at present constituted—the reliance upon the power of the union, rather than upon personal skill, for steady work and good wages. In the present the contractors can do nothing but hire such workmen as present themselves, pay good wages, and by quiet and dignified attention to business retain the confidence of the public. If arbitration would settle the matter, that would be best, but knowing the personnel of the union in Chicago as we do, we cannot see but that the contractor would be placed in a worse position by such a measure than before.

**Directors Elected for the World's Fair.**

In anticipation of the action of the United States senate, which, though dilatory, can hardly be otherwise than favorable to the World's Fair project, the stockholders in the enterprise, about 45,000 in number, held a meeting April 4, and elected a board of directors, forty-five in number, and selected from among the representative business men of the city. They are as follows:

| | | |
|---|---|---|
| Owen F. Aldis. | J. W. Ellsworth. | Cyrus H. McCormick. |
| A. Nathan. | Joseph Medill. | E. M. Phelps. |
| J. J. P. Odell. | H. N. Higinbotham. | C. C. Wheeler. |
| F. S. Winston. | John R. Walsh. | Edwin Walker. |
| E. G. Keith. | L. J. Gage. | Robert Nelson. |
| C. H. Wacker. | Samuel W. Allerton. | J. C. Peasley. |
| R. A. Waller. | D. C. Cregier. | Stuyvesant Fish. |
| J. V. Farwell, Jr. | Mark L. Crawford. | E. F. Lawrence. |
| W. H. Colvin. | Thomas B. Bryan. | A. F. Seeberger. |
| E. B. Butler. | Ferd W. Peck. | W. T. Baker. |
| R. A. Keyes. | C. L. Hutchinson. | E. S. Pike. |
| Charles H. Schwab. | M. A. Ryerson. | Geo. R. Davis. |
| Otto Young. | H. H. Kohlsaat. | Potter Palmer. |
| E. T. Jeffery. | W. E. Strong. | M. M. Kirkman. |
| C. T. Yerkes. | T. J. Lefens. | Andrew McNally. |

We have nothing to say regarding the dilatory action of the senate and committees in charge of the matter at Washington. That a man as prominent in affairs as Mr. Depew, simply to make political capital, should lead so disgraceful an attack upon so national a project as this, is beyond expression, while the main argument used by Mr. Hiscock and others, that Chicago cannot raise $5,000,000 in its support, is worthy of the ridicule placed upon it by that prince of newspaper writers, Mr. George Alfred Townsend, in a recent article, in speaking of the new Auditorium building, in which he said: "When we hear the remarks in different parts of the country by the small boys that Chicago cannot raise $5,000,000 for the World's Fair, we may consider that she has just raised $4,000,000 merely to put up a hall and a hotel." By a careful estimate the wealth represented by the directors elected aggregates about $70,000,000.

## Romanesque Architecture.*

### Chapter XIII.

CHURCH CAHORS (LOT)—CHURCH OF ST. AVIT SÉNIEUR (DORDOGNE).

THE first churches built after the model of St. Front, that is, those of the next generation like those of the city of St. Etienne, at Perigueux, or of Cahors, preserve the same mode of construction, but present differences in the plan. The lateral arms of the Greek cross are suppressed and there remains a rectangle formed of two or more bays, crowned with cupolas and terminating in a half circular sanctuary, surrounded as at Cahors, by small apsides, or even simply by the inclosing wall of the cloister on one of the sides of the terminal bay. This is as at St. Avit and was either because it was a satisfactory arrangement or because the edifice was never finished. (Fig 161.)

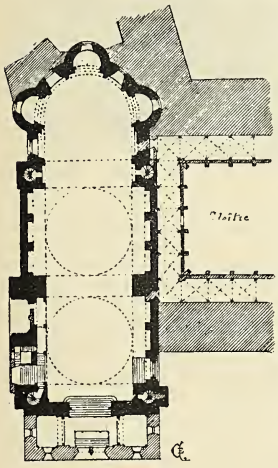



Fig. 161.

The church of St. Etienne, at Cahors, although it was dedicated in the first years of the twelfth century, was, however, begun in the preceding century and must have been contemporary with the finishing of the celebrated church at Perigueux. It is, moreover, one of the most important and faithful imitations of St. Front.

The construction of the church of Cahors, or at least the front part of it, is very similar to that of St. Etienne, of Perigueux, which closely follows the construction of St. Front.

There can be seen in the two churches, and especially at Cahors, a marked improvement in the economy of the construction. The connecting arches are not so large and it can be perceived that the architects familiar with the cupola, calculating better the thrust of the arches and vaults, as well as the resistance of the points of support, here made a very perceptible progress which bears witness to their technical knowledge.

In the interior of the church the architectural parts are the same as in that of St. Front, but the general proportions of the grand arches

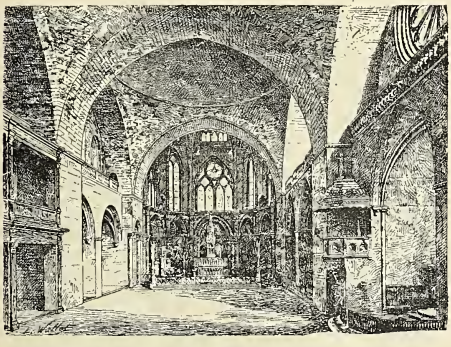


Fig. 163.

is less satisfactory, being lower and heavier. The nave is composed of two equal bays without lateral galleries. The piers forming a projecting buttress into the interior are solid, except a narrow passage at the height of the lateral gallery and they have only one simple decorative arcade. (Fig. 163.) The two bays are crowned by hemispherical cupolas on pendentives cut as at St. Front and lighted at their base by little windows, opening to the four points of the compass. At the east end a vast hemicycle, of the width of the nave, is covered by a quarter spherical vault; it is surrounded by three small apsides,

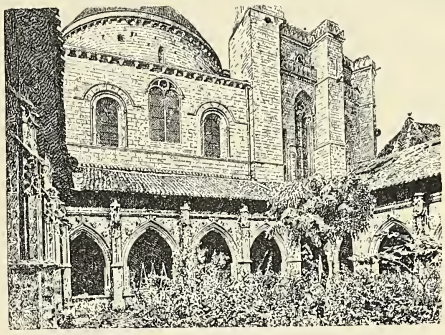


Fig. 164.

and recalls, in spite of the absence of the colonnades of the interior sanctuary, the arrangement of the choir of the Church of the Holy Sepulchre, at Jerusalem, a resemblance to which we have already noticed in studying the Church of Vignory and those of Auvergne.

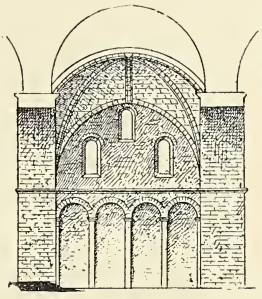


Fig. 166.

This part of the church, moreover, appears to be of a later construction than the nave; but it has, however, all the peculiar characteristics of Romanesque architecture.

The interior of the church presents a most interesting arrangement, because the cupolas are very frankly shown. They rise above the highest part of the roof, the cornice of which is sustained on corbels (Fig. 164); they show the drum of cut stone work forming the base of the cupola, and crowned by a cornice ornamented with corbels. Today the roof is covered with woodwork, but it is probable that the original covering was of stone, or that it was covered with plates of metal, like the hemispherical top of the cupola.

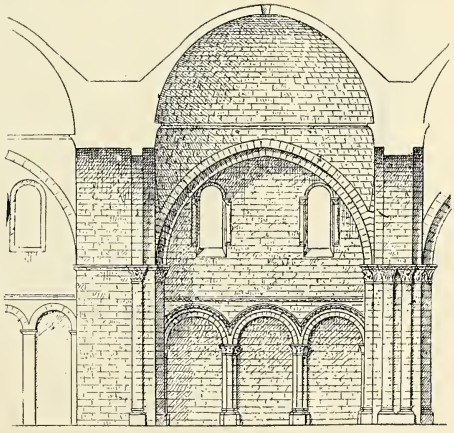


Fig. 168.

The church of St. Avit-Sénieur evidently was of earlier date than the churches with cupolas of St. Etienne, that of the city of Perigueux, of Cahors, and of St. John at Cole, which had their origin in St. Front.

* "L'Architecture Romane," by Edouard Corroyer, Paris. Translated and abridged from the French for The Inland Architect, by W. A. Otis, architect. Commenced Vol. XIII, No. 3

The plan of St. Avit, as well as its section, is the same as St. Etienne, and the other above mentioned churches, and the details of construction are identical. But what makes this edifice especially worthy of attention is the arrangement of vaults, and those vaults themselves are different from those of the churches with cupolas, from the model of which St. Avit was planned and executed.

There is nothing to prove by what has been written that cupolas were built, then destroyed to be replaced by the vaults which still exist today. If this church, commenced on the plan of St. Front, or any of its derivitives, was crowned with cupolas on pendentives, the keystone of the ribs ought to have been cut according to rule, and the courses of stone followed the line of the spherical pendentive.

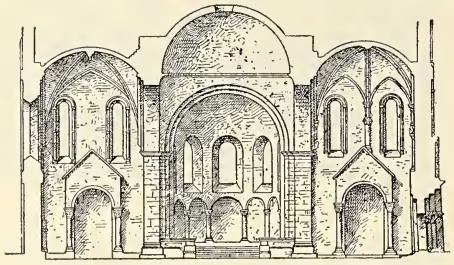


Fig. 170.

The changing of these, if admitted that they were replaced afterward by vaults, whose ribs are marked by diagonal arcs, would have necessitated a work of removing and replacing, much greater than the construction, or an entire reconstruction so as to make a hemispherical covering. It was much easier, when the pilasters had reached the height of the springs of the arches, to foresee, in the cutting of the springers, the curve of the ribs. This is evidently what has happened, and it is very probable that toward the end of the eleventh century the arch ribs were constructed, an epoch in which we see appearing, timidly at first, the diagonal arch ribs.

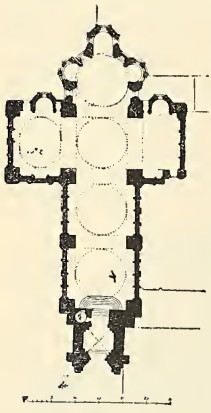


Fig. 172.

(Fig. 166.) Moreover, the vaults of St. Avit, which are supposed to have been made over at the end of the thirteenth century, are not cut like those at the end of the twelfth or the following centuries, that is to say by ribbed vaults, whose intersections are marked in an especially accentuated manner by diagonal ribs.

The vaults shown in figure 166 have no longer the form of the cupola properly speaking; it is the annular vault, cut horizontally or nearly so, sustained, as it should be, by prominent centers, with the aid of intersecting transverse ribs, accentuating the keys of the ribs.

It seems as if one ought to be able to see in this ingenious disposition of the vaults of St. Avit an arrangement much lighter than in the cupolas, and, consequently, having less thrust on the side wall, the transition from cupola to groined vaults resting on the diagonal ribs. We have shown this in chapter XII, while studying the pendentives of St. Front, which are compared to the intersecting ribs, and where the identity of their usage is shown.

These characteristic experiments of St. Avit subsequently occur more frequently, and their development can be followed in the first part of the twelfth century in Germany, Italy and France.

## Chapter XIV.

### Cathedral of Angoulême (France) — Church of Ripen (Denmark) — Church of Solignac (France).

The churches built after the model of St. Front were again modified in the second generation, the plan being changed to the form of the Latin cross, by the addition to the transept of two arms covered with barreled vaults.

The interior arrangements were perfected, and marked still more the progress shown in the church of Cahors. You can feel the constant desire of the Romanesque architects to find a means of diminishing the enormous weight in the churches with the primitive cupolas, by divisions that were better balanced, and by giving more attention to the thrust and resistance, and by recognizing these principal points of resistance by the counter-buttresses, which began to jut out on the

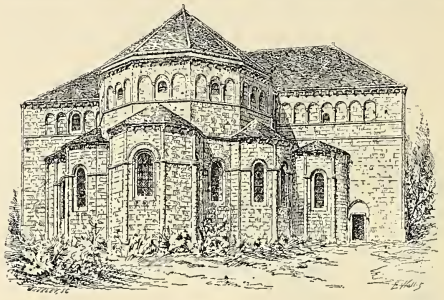


Fig. 173.

outside of the edifice. The art of the architect was even exercised in the decoration of those points of support and in lessening the weight of the ribs of the arches in the interior. But at this epoch the exterior form lost its original peculiarity, because the cupolas were no longer prominent from without. They were moreover covered with a commonplace roof with two sloping sides, and there was no longer anything to distinguish them from the other Romanesque churches with one nave. The churches of Brassac (Dordogne) and of Sablonceaux (Charente-Inférieure) were built, or rebuilt, on the same conditions as those of Angoulême and Fontevrault.

The church of Angoulême, built at the commencement of the twelfth century on the ruins of a more ancient edifice, is composed of a single nave vaulted with three cupolas, and covered with a pointed roof with two sloping sides; at the eastern end of the nave rises an octagonal lantern tower. This lantern tower was re-covered about 1680 with a cupola which probably did not exist before this epoch. The original sanctuary, without side aisles, was in the form of a hemicycle, flanked as at Cahors, with small apsides, recalling the Holy Sepulcher. This hemicycle or principal apse is accompanied by two smaller apsides, vaulted like the sanctuary in quarter spheres. The two arms of the transept, covered across the width by barreled vaults, give to the edifice the form of a Latin cross, made more plainly marked by the construction, about the middle of the twelfth century, of two towers, one of which was left unfinished at that time to be completed a little later, and the other left at the height of the ridge pole. (Fig. 168.)

The school of Angoulême, according to Anthyme Saint Paul,

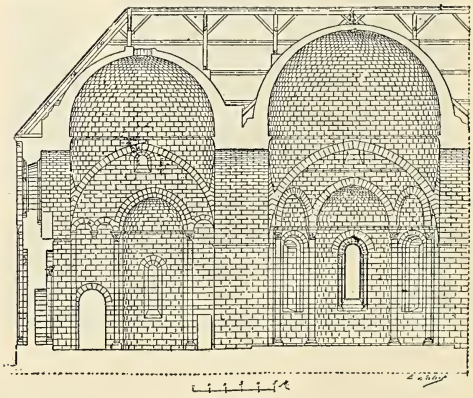


Fig. 174.

served as a connecting link between the Périgordian and Poitevine schools, borrowing from the first its single naves and cupolas, and from the second its rich façades, its wealth of arcades and sculptural decoration.

The façade of the church of Angoulême which recalls that of Notre Dame la Grande at Poitiers, is entirely covered with arcades and

carving representing the last judgment. The influence of St. Front was felt as far as the river Loire, which modern archæologists (perhaps a little jealous of the glory of this tower) consider as the extreme limit of its influence.

A church built about the twelfth century in one of the secluded provinces of Denmark, shows us the extent of the spread of the ideas which caused such a fruitful revolution in the art of building in the eleventh century. These effects were felt from the end of this century and especially during the twelfth century, throughout all Western Europe, not only by the reproduction of the cupola, pure and simple, but, moreover, by the successive and rapid transformations which were born of this mode of construction.

The church of Ribé or Ripen in Jutland is one of the numerous churches founded by Canute II, called the Great, after he had converted his people to christianity in the first years of the eleventh century. It was rebuilt after a fire in the twelfth century, according to the model of St. Front or one of its imitations (Fig. 170). The central cupola on pendentives is a perfect likeness in form as well as peculiarities of structure of the mother church, with this difference, that the ribs of the arches are full centered. The arms of the transept are covered with annular vaults on crossed ribs like those of the nave of St. Avit Sénieur.

The church of Solignac (Fig. 172), in the department of Haute-Vienne, is an example of an edifice with a cupola in Limousin. (Fig. 173.)

It resembles that of Cahors, except in the number of bays and the arrangement of the sanctuary, covered by a vault constructed at the same time in a quarter sphere on the side of the hemicycle and on pendentives on the side of the triumphal arch, forming the entrance to the choir. (Fig. 174.)

The aisles of the transepts seem to have been changed since the original construction, those of the southeast being covered with barreled vaults, and those of the northeast with a hemispherical cupola, oval in plan.

The nave is composed of four bays, crowned by a cupola on pendentives, the last with the peculiarity we have mentioned, covering the sanctuary, cantonned as at Cahors with three small apsides, covered with quarter spherical vaults. These apsides, circular in the interior, are polygonal on the exterior, and each of the angles is provided with a buttress in the form of an engaged column.

The cupolas of Solignac are covered like those of Angoulême and others that we have mentioned, by a gable roof. In the exterior the proportions are less pleasing than those at Cahors. In the interior the large and small apsides, although polygonal, recall the churches of Poitou, and especially those of Auvergne, by the characteristic details of the ornamented arch in the high part of the apse, in the transept or surrounding windows arranged at the base of the cupolas of the sanctuary.

The church of the monastery of Solignac was built in the first years of the twelfth century, for the dedication of it was in 1143.

(*To be continued.*)

## Colonial Architecture.

BY C. BRYANT SCHAEFER.

THE origin of every art, great or small, the fountain head of every style that finds a permanent resting place among us, is in the spirit that prompts its creation. That spirit is the sentiment that will embody the work and give it life. Truth, honesty of principle and sincerity of purpose are its attributes.

The time when art first adopts a new and worthy personality may be obscured by prevailing customs and resisting tenets, dogmas that are but the warm ashes of former splendors, reduced and despoiled by the vanities that follow in the steps of success. If this art, which is seeking to grow forth anew, can do so untrammeled by impertinent forms and unfavorable surroundings, it will be more perfect from the beginning, and the sentiments that inspired its creation can be traced further back to their sources and the reasons for its origin better studied and more easily understood.

To look back upon the beginning of what we have come to term the "Old Colonial" style of architecture, we must visit the scenes of its birth and early nurture.

On our cold New England coast, many years ago, when the populated shores of today met the Atlantic with an unyielding breastwork of wilderness, there was congregated in small communities, along this eastern country, a people of character, brave, hardy and earnest; tireless in their toil and unwavering in their devotion. The fields and forests that had grown forth in sunshine turned toward them the same resistance that had withstood the storms of seasons. Amid hardships and adversities, the pilgrims came to enjoy the liberties which were denied them in the land of their birth. Roofs erected on poles were their first shelter, huts of rough-hewn timber their dwellings. Whatever they did was done without affectation, because it was done from necessity.

When an art has a superabundance of means at hand, that which should be the dominant idea often becomes obscured by a conscious addition, an extravagant use of existing resources, so that a little necessary frugality may mean much more for its benefit than at first sight would seem probable. It is confining to the subject, that is, if the subject is understood, which consists in understanding the requirements and appreciating their possibilities.

Finally the forefathers, through perseverance, were able to provide themselves a little more with the comforts of life. With the means at hand they were able to build houses with greater attention to their needs. Their homes were built for protection: all was gathered together within walls. Porches were not consistent with their wants, and even wide-spreading cornices did not always seem desirable, for bending the close-pitched roof at the ceiling and bringing it tight down to the story below, it was finished upon a narrow cornice without brackets. What would more perfectly express the shelter and defense against the elements that had been so long sought for than this gambrel-roof? Nor was a hardly less want supplied when the fireplace was erected in the middle of their houses, with openings, large enough for logs, on opposite sides of a chimney of like dimensions; expressing at once, by its proportions, the degree of their desires.

As the years passed, one upon another, and the people of the "New World" had at last a little leisure, and were less harrassed by circumstances, new thoughts came to them. Perhaps they were dear memories of an old country not forgotten, associations cherished that could know no returning, sleeping unknown in the breasts of these pioneers. Crowded from sight by urgent necessity, these emotions had at last their moments of freedom. Through their influence, noble sentiments became more noble, and worthy desires more worthy. And as this precious past rose up it mingled with the present and its new found love, a love of home strengthened by the hardships of acquirement, and became the sentiment to create a new art, a sentiment so sincere that it could not rest until it had left its impress on something and found reflection in the works of those it possessed.

The religious motive of those people should not pass unnoticed. Whatever may have been its characteristics at different periods or in different communities, it was one of the great influences of their lives and pervaded all they did. Having acquired, after years of endeavor, that which they had labored for, the home, these sentiments prompted the new countryman to adorn it. Some embellishments over the doorway — a window-cap, perhaps a porch — were the results. The design was classic; as such it was a reminder of the past. It was dignified because it was simple. It was truthful, for when his idea ceased to prompt him he ceased to work.

The mistake of doing a thing in a certain way because someone else had wrought beautifully that way, was not here committed. The mistake of loading on decorations under the promptings of knowledge was not here made. He knew what he wanted, and if his learning was inadequate for the expression of that want, he taught himself the requisite skill — "out of a book." The use of Greek form was principally confined to details. That system of trying to adapt modern requirements to suit the structural necessities of an antique people, could not obtain in a land that had learned to value comforts and conveniences as this had. The time that might have been spent in such ineffectual efforts was devoted to making more perfect that which circumstances allowed. As large houses were built, churches and court houses, the style became more complete and the details more varied. Fine moldings, delicate carvings, beautiful proportions combined with a dignified grace and a still judicious use of ornamental features was the felicitous consummation of all these tendencies. But everything excellent has its degrees of inferiority to accompany it. Many examples of the Old Colonial are found to imitate, more or less, the Greek proportions in their mass as well as detail. Where they have departed from the individuality of requirements and fallen into a manner of copying, the work has approached nearer in character to that of the contemporary architecture of European countries, and is consequently less American.

City and country neighborhood and locality have given to this style of architecture distinguishing traits. They increased with the development of the country until, as the habits of the people became

diversified, their intercourse more general, as new requirements created new ideas, the spirit that had prompted this style of architecture, became wasted among the many influences of a new and growing world. But essentials like these can never be lost. It is the power of taking advantage of their existence that determines whether they shall have appearance or not, so that today we find among us evidences of an architectural style that is already being called the American Renaissance of the Old Colonial. Beautiful work is being done — work that is harmonious and full of meaning. It is because the same spirit that infused the old, still lives to animate the new. There is no better evidence of this than the taking portions of early colonial work and incorporating it with the modern. It speaks well also of the degree of refinement that was attained in the early examples. The nature of the material (wood) that was worked in allowed of fine and clear moldings. That this advantage was not corrupting is due to the taste and moderation of the forefathers.

Today the same circumstances are favoring a further development; not an imitation, but a continued growth, the extent of which can only be conjectured. As long as we do not strive after novelty, bizarre effects, or fall into mannerisms, the work will be beautiful. But the elements of beauty are so subtile — that which beauty expresses is so hard to grasp designedly — that the slightest contact with the baser motives will corrupt and rob it of its constituent principles.

## Water-Color Study as Applied to Architecture.*

MOST of us have enjoyed a bit of outdoor work with the brush, and who has not returned from it to the architectural problems with renewed vigor and enthusiasm? Once tried, and nature wins another devotee to her unfailing fascination. It may be that water-color study is only of indirect benefit to the architectural student, but all studies in the fine arts, however remote, are of incalculable good in architecture. The study of men and manners tend to give ideas of the requirements of a nation and adaptation of styles of architecture to their varied needs. Architects (and we all expect to be architects some day) must keep in advance of the civilization and education of the people, else the people, with a full sense of their desires, will assume the prerogative of the designer, that is, if the architects are their inferiors in education. General enlightenment has created the demand for architecture, and it is the architect's duty to so fit himself as a draftsman that he may give to the world work of enduring art. The drama gives universal pleasure, and few there are who are not competent to judge largely of the merits of a performance. The day is coming when architecture will be as familiar to all as the drama. If the opportunity was offered, few designers that have studied color would build any of the blocks with such inharmonious colors as are to be found disfiguring streets from one end to the other, in so many cities. It is the duty of the architect to take into consideration the surroundings where he is about to build, but how few do it? The result is each makes his mark by designing and conceiving color in his own way — a fact deeply to be regretted.

If architects, in the blind rush of business, would stop a moment to reflect, they would be careful about placing a brown or red stone building in juxtaposition with a green stone one already standing by the site, causing thereby astonishing vividness.

By water-color study we learn that color only has its value by contrast or harmony with another — that we cannot tell the exact effect of one color without study of its neighbor, as changes in the surrounding color produce different effects in the character and color of the first. Thus brown, placed near bright green, is much heightened in key, appearing red. There should be a key in all combinations of color, as light or dark, which should be carried through all with method.

Who can stand before a grand landscape and condemn a group of architectural draftsmen sketching, making as an excuse that it is not architectural? Is it fitting that we should be always at the grindstone without looking about for bits of inspiration from nature? Or must we, old fogy like, go for our ideas only to the buildings gone before? The study of an old house, added to a sketch as fancy or necessity dictated, is a lesson in architecture for its truthfulness in representation of the simple arrangements of the interior or the requirements of the inhabitants. Again, with the study of water color, when applied to nature, grows a fondness for the things of beauty, followed by an appreciation and an acceptance of all her belongings. An arrangement of trees, a bit of meadow, a hill — all will be in the mind as things of beauty. This will lead to a better understanding of the *thing* of architecture it may be your good fortune to place there, not like the many misfit buildings of nowadays, altogether out of harmony with their surroundings.

Water-color work leads one to make deeper inquiry into the essential points of value in designing, namely, light and shade, for without these there are no effects in executed work. If a certain shadow is required in a water color, it shows the need of it in the executed design, so that, with a conscientious study of the case, the particular projections or recess will be brought to the fullest extent of perfection. For example, note how unsatisfactory buildings with north fronts are — and they would be worse were it not for the reflected light. If, then, you would be truly a draftsman, technique must be understood as the first difficulty to overcome. If water coloring does nothing more for a student than to give him the freedom with a pencil that is acquired by the use of the brush, something is gained.

A design is best when executed of the material the designer had in mind during his study over the conditions presented. As the grouping, carving and molding grew under his deft fingers, the color was thought out in harmony with the style of architecture. Many of the younger men at drafting have the idea that good designers design quickly. Never were they more mistaken. Only by patient study, consideration, reconsideration, adaptation of ideas here and there, free use of the rubber, so that at the end of the day he finds he has many more thoughts than his blank paper would indicate. And yet the matter is still in his mind; gently, in his slumber perchance, the inspiration he has been wanting creeps into his faculties, and then, on the morrow, thoughts and pencil fly quickly in unison; the intelligence of the architect is brought to bear; suggestion of changes here and there takes place of the ideas; the question of how this and that should be, requiring sketches of bits, studies of the whole, until all is complete, and then that completeness is enhanced by that color of which we are all so fond and are willing to defend. What assists a designer more than a bit of truthful color put on by the practiced hand to the carefully drawn perspective sketch — shadows projected, giving at once with a few telling touches the character of the design and the effect of the same in the desired material? How many beautiful designs have been injured by a poor selection of the material color? If color does not enter as an important factor into architecture, why is it that the little bits of ivy give such value to villas, chateaux and cathedrals? Why are old towns and cities with their moss and lichen-covered roofs and gray-spotted walls so much admired by people of taste, who do not always take in their designs? How well suited they are to the landscape. If we decide that color study is necessary to architecture, then there remains but one medium for the work and draftsman, namely, water color. Although it is not my intention to discourage the use of oil or any other color expression, I take water color for its simplicity and facility in quick expression of the thoughts flowing through eyes and fingers from the storehouse of study and experience. Knowledge is man's success. Knowledge obtained through study of water color, if only for pastime, is valuable as an educator to anyone, but is invaluable to the draftsman and architect. Their taste should regulate the colors in stained glass, or the harmony of colors in decorations, when called upon to assist in the furnishing of a house. Good color in decoration is better than good ornament poorly colored. Hence good coloring is necessary knowledge for the draftsman, and it can be only obtained by study. Study, theoretically, is good, but it is better when supported by facts and practice.

Let us take two architects, one who does and the other who does not consider it within his province to study color. We can readily see that the clients of the one who is a student or master of color will soon recognize the fact, and that he will become the most popular, all else being equal.

Authorities agree that an architect should know everything; especially should he be well versed in music, painting and sculpture, all representing the poetry of architecture. It is not difficult to understand the great advantage to an architect of knowledge in these branches of art, representing as they do the absolute requirements of practical architecture. Music, represented by the dignity of outline and poetry of suggested grouping; painting, the local color, light and shade, material and texture; sculpture, the detail, the mark of necessary recognition to the character of any monumental building. The Egyptians employed crude color successfully in their architecture. The Greeks used more refined colors. As they were superior to the Egyptians in design, so were they in color. The Greeks attained the finest grace and dignity, with perfect proportion, and their work retains this quality and superiority over all architecture to the present day. How thoroughly harmonious are the colors in the Venetian buildings. Perfectly are colors studied for their reflections in the canals — an added glory to the straight lines in reality — the rippling water playing havoc with the design — twisting, turning, and ever making new forms at its pleasure. Upon considering Venetian architecture, one feels that nature has a great deal to do with the picturesqueness of the grouping of these buildings — the architects designing to take advantage of an opportunity to assist nature. An artist in composing his landscape makes his drawing and coloring in a truthful vein, although his picture by no means is any particular spot, but of ideas gleaned here and placed properly by his trained eye. The result is satisfactory. The same is true of architecture. The study of good examples teaches true proportion, lightness above strength. There is no necessity for anything approaching a copy. A poetic comparison might be drawn between nature and architecture. Nature is nothing if not color, and we are ever admiring her changing glories The calm gray of the morn — the clear purity of the moon — the gorgeous splendor of the sunset — the tranquillity of the night. Why should not this be applied to architecture — our buildings designed from bottom to top upon the idea of the growth of the day, of which, during the different periods, the colors are entirely harmonious, yet ever changing? Apply this as an essential to architecture. The base quiet and solid; the shaft slender and clean; the frieze rich and chaste; the finish simple, broad and fitting. A conception of color sometimes leads to a successful scheme in design. To be more clear: While thinking or dreaming of color, how easily we are led, by our architectural education, to an application of the color-thought to something more substantial? We will weave lines about colors hemming them in, to give added effect to the work. Painting can be aptly compared to architecture, as it is not altogether, as some suppose, schemes of color. It is correct form enhanced by color merely, for without good drawing and the important factors, light and shade, there is nothing in the color. But a combination of the three elements,

* Paper read before the Chicago Architectural Sketch Club, March 24, 1890.

drawing, light and shade, and color (I should more properly say correct drawing, because mere draftsmanship, bear in mind, does not imply correct drawing) these things used in architecture with firmness will never make bad work.

What if, as is often claimed, draftsmen, to produce a pleasing effect, exaggerate nature in their water coloring, has it not led into a better state? Has not the architect's ingenuity presented to the public better material — red, yellow and brown terra-cotta; red, yellow, brown and mottled brick; brown, green, gray, yellow and white stone; so on *ad infinitum*? The student of color, and no other, has produced this revolution in material. A few years ago plain red brick was considered good enough, and we learned how to use this simple color with good effect, and had thorough understanding of its possibilities. One, more of an artist than another, suggested a bit of daring color, and, meeting with success, pushed ahead into unknown fields with a thorough knowledge of how the experiment would turn out because he had educated himself in color, and with the draftsman's medium, pencil and brush, had made his sketch, and could tell at a glance that his work would execute with effect. Many a good piece of executed design, the result of much thought, time and study, has been by an untrained eye to delicacy of detail lost in a lot of unsatisfactory and unseemly color. How many really well designed frame buildings are made things of ridicule by the atrocious coloring, presumably left for the owner and painter to beautify in the national colors and striped with as many more backward and forward, up and down, until a look is enough to put one in a frenzy. Every advance made in water color by draftsmen is a triumph in architecture. Thousands of thoughts will crowd themselves into one's brain while seated beside a little musical brook, with brush in hand. Then an inspiration moves the spirit to do the work well. He feels and sees he is right, not with the eyes, but with the inner sense that touches a chord of sympathy. This is what education brings to the practiced colorist, giving quick perception and understanding, of all underlying beauties an innate knowledge. "Music has charms to soothe a savage breast," and it is not to be wondered at if it has the same effect in smoothing over the difficulties of the draftsman and assisting him to perceive the difficulties he has been laboring under moving away as a mist, leaving all before as a summer day. Nature is the principal source of inspiration, and the study of water color sends one to her to learn of her many and varied charms. Everything there is responsive to some unseen power — a gleam of sunlight after a storm — a touch of light here and there, bits of detail, each opening some new beauty. But as we stand before great nature, we must feel the beauties, else how can we expect to paint them truthfully? Our most careful study of her surface will not be what is presented by great artists, even though, by their conscientious study and love for this nature, they have found the hidden things which make their work almost nature's counterpart. So in the design of any structure. The necessities of the interior, the purpose of the building, the structural parts, must be as apparent as the hidden branches of a tree by its foliage, which covers its structure.

Color is one of the poetic themes of architecture. Remove the poetry, and there is nothing left but engineering. Design owes its value to color, because every molding, column or carving adds its effect by color — color lying under and over every movement of belt course, pilaster or ornament, each light, each shade or each shadow ever changing to strongly or delicately mark the character of the design.

We may again revolutionize design after the next World's Fair; our attention will be more thoroughly turned toward Renaissance, and it will be fair to say with different color effects. Then let us prepare ourselves by a study of water color and design, so that in 1892 the draftsmen of this country can show our foreign brothers that, although we are young men and have not the grand examples of art continually before our eyes, we appreciate and study, although at a disadvantage; that our work and inspiration from nature has placed us in the leading rank for originality (within reason) and untrammeled by any precedent.

## Roofing Specifications.

THE firm of Merchant & Co., of Philadelphia, have sent the following letter for publication, and the request is complied with because of the general truthfulness of the statements contained therein and the great desirability for architects to obtain the greatest knowledge possible upon the subject:

*Editors Inland Architect:* PHILADELPHIA, February 6, 1890.

In bringing out our roofing plates, stamped with the brand and thickness, and doing away with the waster sheets of same, it was the object of this house to put upon the market not only an article which the architect could specify with security, but also one that would enable the property owner to receive what he was willing to pay for. There is today a difference of almost one hundred per cent in price between the poorest and the best roofing plate in the market. Nearly every brand is imported of two different qualities: that is, good plates and bad — or wasters. It is absolutely necessary in these days of competition that specifications should be drawn so as to hold each roofer up to his contract. Even the soldering of a roof is such an important matter that the roofer who uses soldering irons weighing but four pounds to the pair cannot possibly apply the amount of solder to the square that should be used; consequently, heavy soldering irons should be used so as to allow the solder to soak well into the seams where a first-class job is wanted. The very best material, if not properly put on, would make the roof a failure. Our object is to assist the architects all in our power, and with this idea in view we have drawn up specifications for both a flat and standing seam roof of the two sizes of plates, which, we think, will be an aid to every architect who desires to use tin for roofing.

The specifications that we have drawn up are simply intended as a *reference* for the architects, and while we have inserted our brand of "Merchant's Roofing" in same, yet any brand which the architect may choose to use can, of course, be written therein. This formula has not been written by us with any intention of dictating to the architect, but rather to assist him in specifying for a roof that will last, as it should, for years, while the majority of tin roofs put on today will not last five years before repairs commence.

Again, the present competition among roofers is such that a roofer who desires to make a first-class job and use good material stands but very little chance of obtaining the contract unless he is better protected by the architect in his specifications.

Yours very truly, MERCHANT & Co.

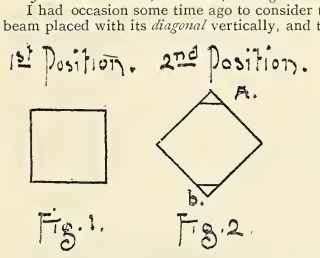
## A Peculiar Problem in the Strength of Beams.

THE following letter was recently received by Architect J. R. Willett, of Chicago, and shows a peculiar problem in estimating the bearing strength of a square beam with its diagonal vertical. Mr. Willett's name is given with an apology to that gentleman, whose desire that the profession may be benefited is greater than his wish for recognition in print, but who takes great interest in collecting and discussing all construction problems:

EDINBURGH, November, 1889.

*To James R. Willett, Architect, Chicago:*

I had occasion some time ago to consider the strength of a square beam placed with its *diagonal* vertically, and to compare this with the strength when the *side* was vertical. I could not find the subject treated in any of the books at hand, so had to go into the matter, and as the results are a little remarkable, I may send you the following abstract, not having anything to forward that appears more interesting, Hooke's Law of Stress and Strain, being assumed to hold good up to crippling of the material:




1. The beam, whether placed in first or second position, will be deflected to the same extent by equal loadings.

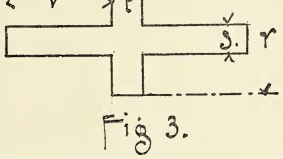
2. Since the *ultimate* deflections must be inversely as the depths, the beam in position 2, will begin to fail under a load = 0.707 of the breaking load for position No. 1.

3. But if the angles *a* and *b* be chamfered off to a moderate extent the strength of the beam in position 2 will be thereby increased.

4. Theoretically, the beam in position 2 attains its maximum strength when the angles *a* and *b* are so far cut away that the depth is reduced by one-ninth; the strength then will be = 0.745.*

5. When the depth, *a-b* is reduced by nearly 24 per cent, the strength is the same as for the unchamfered beam.

Applying a similar calculation to the case of a plate strengthened by feathers, as in the Fig. 3, I find that as the depth of the feather increases from zero, it first causes a reduction in the transverse strength of the plate, the weakening effect soon attains a maximum, and then on further increase of depth of feather, the strength rapidly increases.




The strength $= f\left(\frac{1}{6} t r^2 + \frac{1}{3r} v s^2\right)$; and the strength is a *minimum* when $\frac{r}{s} = \sqrt[3]{\frac{v}{t}}$

Thus for example if $v = 4\ t\ \frac{r}{s} = 1.587$, the transverse strength is least, and the loss of strength from the addition of the feathers is 16 per cent.

The plate does not regain its original strength until $\frac{r}{s} = 2.4$ nearly, or a projection of less than seven-tenths, has a weakening effect.

The strength is doubled when $\frac{r}{s} = 4$, or projection $= 1.5\ s$.

ROBERT H. BOW.

*NOTE.—Tested by actual experiment, we cannot expect the peculiar effect of *strength gained by removal of material* to show itself very decidedly in the case of a substance like wood, for in such the failure of the extreme fibres might take place without affecting the adjoining ones, and the stronger or chamfered form be thus virtually produced. But a substance like glass, in which an initial crack tends to extend itself, would probably readily manifest the phenomenon.

## Illinois Chapter American Institute of Architects.

THE final meeting for the reorganization of the Chapter was held March 17, and the following constitution and by-laws were adopted:

### CONSTITUTION.

ARTICLE I.

The corporate name of this Society shall be, THE ILLINOIS CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS.

ARTICLE II.

The objects of this Chapter are: To unite in fellowship the architects of the State of Illinois, and to combine their efforts so as to promote the artistic, scientific and practical efficiency of the profession.

ARTICLE III.

SECTION 1. The Chapter shall consist of active and honorary members.

SEC. 2. The active members shall consist of two classes, regular and associate.

Regular and associate members of this Chapter shall have equal rights and privileges except that membership as an associate shall cease after two years unless the associate member shall become a regular member by virtue of a fellowship in the American Institute of Architects.

No person shall become or remain a regular member of this Chapter who is not a Fellow of the American Institute of Architects.

SEC. 3. The condition of active membership shall be the honorable practice of the profession of architecture, in accordance with the constitution and by-laws of this Chapter.

SEC. 4. The status of an architect is hereby defined as follows: An architect is a professional person, whose occupation consists in originating and supplying artistic and scientific data preliminary to and in connection with the construction of buildings, their appurtenances and decorations; in preparing contracts between the proprietors and contractors thereof; and in supervising the operations of contractors therefor.

SEC. 5. No member shall accept direct or indirect compensation for services rendered in the practice of his profession, other than the fees received from his clients.

ARTICLE IV.

The officers of the Chapter shall be as follows: A president, a first and second vice-president, a treasurer and a secretary, who shall constitute an Executive Committee.

ARTICLE V.

The Chapter shall hold an annual meeting for the election of officers, and such other meetings as shall be ordered by the by-laws.

ARTICLE VI.

The constitution may be amended only upon a two-thirds vote of the active members present at any meeting of the Chapter, provided, that a notice of such proposed change shall have been mailed to each active member by the secretary on the order of the Executive Committee twenty days before the date of said meeting.

### BY-LAWS.

ARTICLE I.—HONORARY MEMBERSHIP.

Persons who have relinquished the practice of the profession, also foreign architects, civil engineers and other scientific men, as well as amateurs, and other persons of distinction, may be elected honorary members of the Chapter at any meeting upon the recommendation of the Executive Committee. Honorary members shall have all the privileges of the Chapter except those of eligibility to office and voting. Honorary members are exempt from the payment of dues or assessments. The membership of any honorary member residing on this continent shall cease whenever he engages in the active practice of architecture.

ARTICLE II.—MEETINGS.

There shall be a regular meeting of the Chapter on the second Monday after the first Tuesday of each month, from September to June, inclusive.

The place of meeting shall be designated by the Executive Committee, who shall, through the secretary, give due notice to each member of the Chapter of the place and time of each meeting.

ARTICLE III.—ELECTION OF OFFICERS.

All officers of the Chapter shall be elected at the October meeting of the Chapter. They shall be elected by a majority ballot vote of the members present. Officers shall be elected for terms of one year, and until their successors have qualified. Officers may be elected to succeed themselves, except that no person shall be eligible to reëlection as president until two years shall have elapsed, who may have occupied that position for two successive years.

ARTICLE IV.—DUTIES OF OFFICERS.

It shall be the duty of the president to preside at all meetings of the Chapter and Executive Committee, of which latter body he shall be the chairman.

In case of the absence of the president or of his inability to act, his duties shall devolve upon the vice-presidents in the order of precedence.

It shall be the duty of the secretary to keep records of all proceedings of the Chapter and Executive Committee, to send out all notices and to conduct all correspondence, subject to the control of the Executive Committee. The secretary shall also be the keeper of the seal of the Chapter.

It shall be the duty of the treasurer to collect all funds of the Chapter, and disburse the same on the order of the secretary, when countersigned by the president. The accounts of the treasurer shall be audited by a committee of three appointed by the chair at each annual meeting. This committee shall report to the Executive Committee, and no member of the Executive Committee shall be an auditor.

The officers of this Chapter shall constitute an Executive Committee, who shall have the management of the affairs of the Chapter subject to such directions as the Chapter may from time to time impose. It shall require three members of this committee to constitute a quorum.

The Executive Committee shall exercise control over the property and general interests of the Chapter; shall receive nominations for membership and act upon the same; shall consider complaints and expel members of the Chapter for cause; shall act as a committee of arbitration on all questions submitted to it by active members of the Chapter; and shall generally have control of its welfare and interests.

All calls for special meetings shall be issued by this committee.

All resignations shall be made in writing to the Executive Committee, and addressed to the secretary; but a resignation shall not release the member presenting it from any obligation to the Chapter; and all interest in the property of this Chapter of members resigning, or otherwise ceasing to be members, shall be vested in the Chapter.

This committee shall report to the Chapter at each regular meeting.

All appeals from the action of the Executive Committee shall be to this Chapter.

ARTICLE V.—RULES OF ORDER.

The meetings of this Chapter shall be conducted according to Roberts' Rules of Order.

ARTICLE VI.—APPLICATIONS FOR ACTIVE MEMBERSHIP.

Any person desiring to become an active member of the Chapter shall be presented with a blank form of application, which will conform in every respect with that used by the American Institute of Architects, and the election to this Chapter shall be by a unanimous vote of the Executive Committee. The application of no person shall be considered who has been rejected within one year.

ARTICLE VII.—DUES.

The initiation fee of the Chapter shall be $10; and the annual dues $15. Dues to be payable semi-annually in advance, on the first of October and the first of April; and no person shall be entitled to vote at any meeting whose dues remain unpaid for three months.

Any active member whose dues shall remain unpaid for twelve months shall be dropped from the roll of membership, and the Chapter as a corporate body shall not thus lose its right to collect the dues remaining unpaid at the date of forfeiture of membership.

ARTICLE VIII.—QUORUM.

Twelve active members shall constitute a quorum for the transaction of business.

ARTICLE IX.—PAPERS AND RECORDS.

All papers and other records, not considered by the Executive Committee confidential, shall be at all times open to the inspection of the active members of the Chapter.

ARTICLE X.—AMENDMENTS OF BY-LAWS.

The by-laws of this Chapter may be amended by a two-thirds vote of the active members present at any meeting, notice having been given as in the case of proposed amendments to constitution.

The officers of the Chapter are: John Addison, president; S. S. Beman, first vice-president; W. W. Clay, second vice-president; W. A. Otis, secretary; J. L. Silsbee, treasurer. These officers constitute the Executive Committee.

At the close of the meeting, Mr. Treat stated that Mr. Gay had decided to abandon the business of conducting an exhibit of building materials, and proposed turning the same over to the Chapter. Mr. Treat stated in a general way that investigation made by a committee of eight (which he privately explained had been appointed outside of the association) had investigated and found that the business stood about $1,100 in excess of liabilites. The matter was postponed to a special meeting called for this purpose March 24.

A letter was received from Mr. P. B. Wight, resigning his membership in the Chapter, he deeming it but proper that none but architects while in regular practice should be members.

At the meeting on March 24, the discussion was led by Mr. Adler, who thought the main question was in its business aspect. That if successful, the funds could be used to great advantage by the association. Mr. Root opposed the scheme upon professional grounds, holding that there were many practical reasons why architects should not have business dealings of this kind with contractors. These gentlemen, representing the two sides to the argument, were followed by others, the result being the passage of resolutions indorsing the proposition and directing that it be submitted to a ballot vote

It was stated that there were positive acceptances for space in exhibit amounting to $2,800, probable acceptances amounting to $2,400, or an income of $5,200, and the positive expenses for the year $4,170, not including the salary of a manager. This was the only definite statement made to the members.

On motion of Mr. Adler a committee of three, consisting of Messrs. Treat, Root and Beaumont, were appointed auxiliary to the Executive Committee and given power to count the ballot vote, and if affirmative to proceed without further reference to the Chapter. Several, among whom was Mr. Gay, opposed this, holding that a quorum was present and the business should be transacted, the latter also stating that "mercenary objections in certain directions" would be raised, and if left to a ballot vote the measure would be defeated, as he "knew that before the vote there would be some of the members that would be 'seen.'" On the ground of fairness this was overruled and the ballot vote was ordered.

Fifteen members were present, including J. R. Schaub, S. M. Randolph, H. W. Hill, L. D. Cleveland, John Addison, W. A. Otis, S. A. Treat, W. W. Clay, Minard L. Beers, C. J. Warren, N. S. Patton, O. J. Pierce, J. W. Root, D. Adler, George Beaumont, L. G. Halberg.

The executive and auxiliary committee issued a letter ballot, accompanied with the following explanation:

CHICAGO, March 25, 1890.

DEAR SIR.—You are probably aware of the fact that this Chapter has been considering the expediency of taking charge of the Institute of Building Arts, heretofore managed by Mr. Henry Lord Gay, and developing the same into a means of increasing the usefulness of the Chapter to its members and to the building public. This matter has been before two meetings of the Chapter, and has been carefully considered by a special committee, consisting of well-known and trusted members of the Chapter. At the last meeting, held March 24, at, which were present Messrs. Addison, Adler, Beaumont, Beers, Clay, Cleveland, Gay, Hill, Halberg, Otis, Patton, Pierce, Root, Schaub, Treat and Warren, the subject was fully and earnestly discussed, and the following resolutions were unanimously adopted:

*Resolved*, That it is the sense of this meeting that the Illinois Chapter of the American Institute of Architects should assume, either individually or in conjunction with other organizations of kindred aim and purpose, the charge and management of the Institute of Building Arts.

*Resolved*, That the Executive Board of this Chapter, supplemented by a committee consisting of Messrs. Beaumont, Root and Treat, be and is hereby given discretionary power to assume on behalf of this Chapter individually, or in company with other organizations of kindred aim and purpose, the charge and management of the Institute of Building Arts.

The said executive board and supplementary committee are advised, before taking definite action under the authority given them by the above resolution, to endeavor to ascertain by letter or personal inquiry the opinion and wishes of every member of this Chapter upon this proposition.

This committee recognizes the importance of the duty confided to its charge, and is desirous of obtaining an expression of opinion from every member of the Chapter before determining upon the course to be pursued. To enable you to act more intelligently in your reply to this circular, your committee will now present to you briefly some of the arguments against and for the proposed measure presented at the meetings and suggesting themselves to us as we write this paper.

It is urged against the proposed measure that by so doing the Chapter or its individual members will assume a large pecuniary risk. It is also urged against the measure that if the proposed exhibit of building materials and appliances is owned by this Chapter, and the privilege of exhibiting therein is paid for by contractors, that it may be thought by censorious clients of architects and by others that the act of becoming an exhibitor in the Institute in which the architects as a body have a pecuniary interest will place the individual architects under obligations to the individual exhibitors.

As against these arguments the following was urged: With regard to the first, that the financial risk assumed could not, under any circumstances, be a great one, and that the value of the results to be obtained from a successful inauguration and management of the proposed project would be so great as to justify the comparatively trifling risk of a possible deficiency in the first year's business. With regard to the other objection, it was stated that inasmuch as the proposed exhibit would not, under any conditions, pay a dividend to the members of the Chapter, as all surplus earnings would be devoted to the enlargement of the scope of the Institute, such as the employment of skilled experts of high character for the conducting of comparative tests of building materials and appliances, the

establishment of courses of lectures upon subjects connected with their use, etc., that the advantages accruing to all building interests of the city, if not of the country at large, from the establishment and maintenance of such an exhibit by this Chapter would be palpably manifest to all thinking persons, and not even the most unreasonable and censorious client could object upon the grounds mentioned.

In the opinion of your committee there is no doubt of the advisability of the maintenance of the Institute of Building Arts as conducted by Mr. Gay, and of its expansion into a much wider field of action; and it is further the belief of your committee that this expansion of the aims and purposes of the Institute of Building Arts can only take place if the institution is conducted merely for purposes of public benefit by an organization like ours, which exists only for the furtherance of the building interests of our city. As soon as the element of private gain becomes a consideration in the management of the affair, its powers of usefulness are materially curtailed, if not almost annihilated.

In the opinion of your committee the questions to be determined are not so much, therefore, whether we should acquire control of the Institute of Building Arts, but whether we should do so by ourselves or endeavor to call to our aid the coöperation and assistance of kindred bodies, such, perhaps, as the Western Association of Civil Engineers, or the Mechanics' Institute, or the Builders' Exchange, or the Academy of Sciences, or the Art Institute, etc. It is also a very serious problem with the committee whether a person of sufficient executive ability and personal integrity can be found to assume control of the institute on our behalf without involving us in greater outlay than we are justified in assuming. It is further a matter of serious inquiry with the present committee whether a managing committee can be secured from among our number composed of men of sufficient standing and ability, and yet willing to give to the management of the proposed enterprise sufficient time and attention to insure its success.

From the foregoing you will have seen that the bias of this committee is in favor of the proposed action. Yet we wish you to consider this matter entirely upon its merits, and from your own standpoint, and to give heed to the statements made by the committee merely as arguments to be fairly and impartially considered by you before making your reply to the committee.

Your committee further assures you that it will make such thorough investigation of the business aspects of the proposed enterprise as to insure, before committing the Chapter to any action in the premises, a reasonable degree of certainty of success, and a reasonable probability that no loss can occur to either the Chapter or its members.

If a reply is not received by the secretary by return mail, a messenger will call for the same Saturday morning the 29th, when we trust you will have an answer in readiness.

John Addison, W. W. Clay, J. L. Silsbee, W. A. Otis, *For the Executive Committee.*

J. W. Root, S. A. Treat, G. Beaumont, *Special Committee.*

There were forty-five votes cast out of the membership of fifty-nine, the remainder of the membership being out of town or declining to vote. Nine members, Messrs James R. Willett, J. W. Root, Henry Ives Cobb, D. H. Burnham, Louis H. Sullivan, S. V. Shipman, Clinton J. Warren, Martin Roche, of Chicago, and Joseph Mulvey, of Aurora, voted in the negative, and thirty-six in the affirmative. The committee decided to assume the control of the exhibit, and appointed architects S. A. Treat and D. Adler to sign a lease of the premises, as at present occupied, for the year, in the name of the Chapter.

## Recent Legal Decisions.

MUNICIPAL CONTROL OF BUILDING CONSTRUCTION.

The power of a municipal corporation to control and regulate the erection of buildings is not an implied power, but must be specially conferred by the legislature. (State *v.* Schuchardt, Supreme Court of Louisiana, January 20, 1890, 7 South. Rep. 67.)

DANGEROUS CONDITION OF BUILDING.

The owner of a building is bound to know that it is in a safe condition, and in an action for damages resulting from fall of the building, no notice of its condition to the owner need be shown. (Tucker *v.* Illinois Central R. R. Co., Supreme Court of Louisiana, January 29, 1890, 7 South. Rep. 124.)

PARTY WALLS.

Where one builds a party wall under a city ordinance authorizing and regulating party walls, he can not claim the benefit of such ordinance unless the wall is of the thickness required by the ordinance, and otherwise conforms to it and is without openings. (Traute *v.* White, Court of Chancery of New Jersey, 19 At. Rep. 196.)

DECEIT.

There can be no recovery for deceit based on statements made with relation to the amount of labor to be performed in a piece of work unless it appears that plaintiff did not have equal means of knowledge concerning the matter, as it is simply a question of opinion and not fact. (East *v.* Worthington, Supreme Court of Alabama, 7 South. Rep. 188.)

MATERIAL-MEN AS SUB-CONTRACTORS.

When the owner of land contracts with a builder for the erection of a building and the builder purchases the necessary lumber from a lumber firm, which in turn buys it from another lumber dealer, who delivers the lumber to the contractor's foreman without any notice of claim for lien thereon, such dealer is not a sub-contractor within the Minnesota statute. (Merriman *v.* Jones, Supreme Court of Minnesota, February 18, 1890, 44 N. W. Rep. 526.)

NEGLIGENCE OF MASTER.

Where a servant is injured by the collapse of a platform on which he is working, the fact that the insecurity of the platform was suddenly developed without giving time to remedy it, will not excuse the master in an action for damages, if he could by the exercise of proper and competent inspection have discovered the defect, or the probability of its arising. (Murray *v.* Usher, Court of Appeals of New York, 23 N. E. Rep. 64.)

COMPLIANCE WITH CONTRACT NECESSARY TO SECURE LIEN.

In order to secure a sub-contractor's lien, it must appear that such sub-contractor has not only furnished the materials or labor on which his claim is based, but that he has complied with the terms of his contract relating thereto. In a contract to furnish building materials for a building in process of erection "within sixty days," time is of the essence of the contract, and substantial compliance must be shown. (Kirn *v.* Champion Iron Fence Company, Supreme Court of Appeals of Virginia, 10 S. E. Rep. 884.)

STATEMENT FOR LIEN.

A statement for materials and labor in these words, viz: "August 2, 1888.—To three carloads of brown sandstone delivered at J. C. Stout's building in St. Paul, Minnesota, between August 2 and September 27, 1888, $259.80." "To paid men for cutting said stone between the above dates, $387.75," sufficiently sets forth the items of the account and will sustain a mechanic's lien. (Johnson *v.* Stout, Supreme Court of Minnesota, February 10, 1890, 44 N. W. Rep. 534.)

SUBSTANTIAL COMPLIANCE WITH CONTRACT.

Where a contractor has in good faith made substantial performance of the terms of a building contract, though there may be slight delinquencies, if they are not so essential as to defeat the object of the parties, but may be readily supplied, so that an allowance of damages against the contractor will amply protect the other party to the contract, a recovery may be had by a contractor after allowing, by way of set-off, such sum as will be sufficient to complete the contract according to the specifications, and the *onus probandi* is on the party setting up the defects. (Leeds *v.* Little, Supreme Court of Minnesota, January 29, 1890, 44 N. W. Rep. 309.)

CONSTRUCTIVE MEASUREMENT OF BRICK.

A rule of a bricklayers' association for what is termed "constructive measurement," which varies constantly according to the percentages which are added or deducted under other rules of the association, cannot be applied to the contract unless the other party is fully informed as to the rule and the effect of its operation. A contract for mason work by cubic yard must be measured as cubic yards are ordinarily understood, and not by an arbitrary rule unknown to the other party to the contract. (Ambler *v.* Phillips, Supreme Court of Pennsylvania, 19 At. Rep. 71.)

LIEN PETITION MUST DESCRIBE LAND ACCURATELY—WHAT ACCOUNT MUST SHOW—PRIOR TRUST DEED.

Rev. Stat. Ill., Ch. 82, Sec. 5, requires a petition for a mechanic's lien to contain a description of the premises subject to the lien, and a decree granting a lien on more property than that described in the petition is erroneous, and will be reversed. Where the entire account contains material not used, nor furnished to be used upon the land on which a lien is sought, the surplusage is immaterial. Where the petition shows that the lien is prayed for subject to a prior trust deed, the holder of the note secured by such trust deed is not a necessary party to the foreclosure of the lien. (Portoues *v.* Badenoch, Supreme Court of Illinois, January 21, 1890, 23 N. E. Rep. 349.)

MECHANIC'S LIEN ON PROPERTY LIMITED BY CREATION OF TRUST FROM SUCH LIEN.

Where a deed which conveyed land in trust provided that the trustee might improve the same, "provided there shall be no lien, incumbrance or charge created thereby on said premises," the record of such being thereafter destroyed by fire, such record is nevertheless constructive notice that the land could not be charged with a mechanic's lien under any contract with the trustee. The fact that subsequent to such contract a decree was filed restoring the burned record, in which it was falsely recited that the trustee had power to incumber does not alter the case, for the contract could not have been made on the faith of the decree, nor would such a decree affect a purchaser from the lienor after entry of the same, unless he was a party thereto. (Franklin Savings Bank *v.* Taylor, Supreme Court of Illinois, January 21, 1890, 23 N. E. Rep. 397.)

GROSS ACCOUNT FOR SUB-CONTRACTOR'S LIEN.

A builder who had contracted with the owner of certain land for the erection of a house, contracted with a third party to furnish and lay the tile required, for a certain sum in gross, to be paid on completion of the job. It is held that a statement in gross of the labor and material in furnishing and laying the tile, corresponding with the substance of the contract under which it was laid, was a sufficient statement of account to secure a lien to the sub-contractor, and the amount secured by the lien will be governed by the contract between the contractor and the sub-contractor, in the absence of fraud. While such contract may not be conclusive upon the owner, yet *prima facie* it is the measure of the amount of the lien, subject to attack for fraud or mistake. (Leeds *v.* Little, Supreme Court of Minnesota, January 29, 1890, 44 N. W. Rep. 309.)

DAMAGES FOR DELAY IN MATERIAL CONTRACT.

In case of a contract to deliver sash and window and door frames for a building in process of erection, in order to charge the seller with loss of rents arising from his failure to deliver such material within the time limited by the contract, it must have been made under such circumstances, and upon such a state of facts, that it may reasonably be supposed to have been contemplated by the parties, when making the contract, that such loss would follow its breach, and hence that the seller consented to become liable for it, and such facts and circumstances, if relied on, must be pleaded and proved. Where a contract is silent as to the time of performance, a reasonable time is intended, and if the contract is in writing, proof of an oral agreement variant from that presumption, is not admissible. (Liljengren Furniture & Lumber Company *v.* Mead, Supreme Court of Minnesota, January 29, 1890, 44 N. W. Rep. 306.)

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The *Cosmopolitan* magazine offers $600 for the best design in three competitions, $200 each. The subjects are public baths, public laundries, tenement house coöperative kitchens. The specifications and other particulars can be obtained by addressing the magazine at New York.

## Association Notes.

COLUMBUS ARCHITECTURAL SKETCH CLUB.

The winner of the Columbus Architectural Sketch Club gold medal in the competitions of last year, Mr. George H. Bulford, is a bright, energetic young man, judging by the photograph which adorns the white silk menu card used at a banquet given by that gentleman recently to the members of the club. Mr. Vance Hebard is secretary of the club, which at present has a membership of twelve.

ST. LOUIS CHAPTER, A. I. A.

The architects of St. Louis have formed a chapter of the American Institute of Architects and secured a charter from the national body.

The officers and members are as follows: President, P. P. Furber; vice-president, J. H. McNamara; secretary, A. F. Rosenheim; treasurer, Charles K. Ramsey. Fellows, J. Beattie, T. C. Link, T. B. Annan and T. J. Furlong; associates, W. S. Evans, T. C. Young, W. C. Clark, K. Tully.

EDINBURGH ARCHITECTURAL ASSOCIATION.

A meeting of the Edinburgh Architectural Association was held February 20, in the hall, 42 George street — Professor Baldwin Brown in the chair.

Mr. Henry F. Kerr read a paper on "Ingress and Egress for Public Buildings," a subject which, he said, had only in recent years met with any serious and sustained consideration. To render panic among an audience impossible or innocuous, he emphasized the necessity of passages, staircases and doors being of such ample width as to allow the building to be emptied speedily. All exits should be always used, and individually they should be of such capacity as to visibly recommend themselves to the audience. In Terry's Theater, it was pointed out, the exit accommodation was sufficient for a house of four times its capacity. The Glasgow scheme of enlarging the exits for the upper floors was, Mr. Kerr thought, to be recommended. A plurality of exits for each block should in all cases be insisted on, and the exit capacity of the seat rows should also be attended to. Stairs for ascent and descent ought not to be of less width than the corridors between them and the auditorium, or wider than the corridors between them and the exterior. They should be provided with a hand-rail on both sides, and where six or more feet in width should also have a hand-rail in the center. The straight stair was open to objection, if of any length, the square and the newal square — which doubled on itself — being the safest forms. It was desirable always, in the interests of safety, to reduce the number of steps required for access to the various parts of a building, as the danger was, generally speaking, in proportion to the number of steps to be traversed. Hence the object in sinking the pit in theaters below street level, to reduce the height from the street to the gallery, and hence also the merit of Mr. Tarver's plan, which placed the gallery outlets at the level of the lowest seats in place of at the level of the highest. He recommended that all exit doors should be conspicuously marked as such, so that the audience might not use a door which did not lead to the outside of the building. Doors should open outward or swing either way, and should not be secured except by some fastening which yielded automatically to pressure from within. Corridors and stairs should be kept clear of all obstructious, barriers being very rarely if ever admissible.

Mr. Kerr was cordially thanked for his paper, which was illustrated by plans, diagrams and models.

The first visit of the present session of the Edinburgh Architectural Association took place on Saturday afternoon, March 8, when a large company of members had an opportunity of being shown first over the old University buildings, and afterwards over the new public library.

Assembling in the senate hall of the University, the company were received, on behalf of the senatus, by Prof. Baldwin Brown, who apologized for the unavoidable absence of Professor Kirkpatrick, secretary of the senatus. Prof. Baldwin Brown, who happens to be president of the association, assumed the leadership of the party — first pointing out the portraits and other objects of interest in the senate hall itself, then showing the company over the University library hall, next conducting them over the natural history museum, and finally accompanying them to his fine art museum in the dome, while in the library hall he gave to the members a most interesting sketch of the history of the present University buildings. In particular, by reference to the plans themselves and to numerous documents bearing upon them, he fully explained the extent to which, and the reasons for which, after Robert Adam's death, his plans were modified by Playfair, who was entrusted with the completion of the work. Before the party left the University, a cordial vote of thanks was, on the motion of Mr. McGibbon, awarded to Prof. Baldwin Brown for his kindness in conducting them, and to the senatus for their courtesy in giving the association the opportunity of going over the buildings.

Thereafter making their way to the public library, the company were received at the entrance by Mr. Washington Browne, the architect of the building. Mr. Browne first explained the carved designs and devices on the George IV Bridge elevation, and then successively showed the party over the lending, the reference, and the newsroom departments of the building — describing as he went along the general arrangements of the different departments, and the principles which had dictated these. A visit was also paid to the basement floor of the building, where the electric lighting arrangements were fully explained.

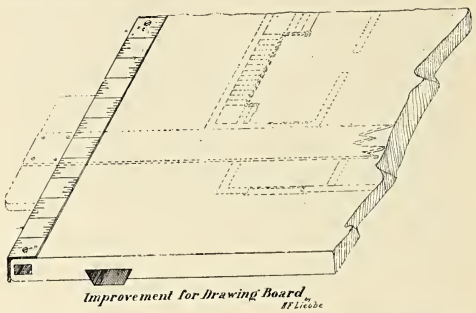
In proposing a vote of thanks to Mr. Washington Browne, Prof. Baldwin Brown said he thought they should not only acknowledge the kindness which Mr. Browne had just shown them, but should also congratulate him on the beautiful building which he had erected — a building which, he was sure, would be recognized as a great ornament to Edinburgh. Mr. Browne briefly acknowledged the compliment thus paid him.

## An Improved Drawing Board.

*Editors Inland Architect:* DES MOINES, Iowa, March 16, 1890.

DEAR SIR,—I inclose a tracing for my improvement for drawing boards, the object of which will be apparent at a glance.

After spending years at the business, putting up with constant annoyance of crooked edged boards, I concluded to remedy the general defect with the result shown.



*Improvement for Drawing Board.* H. Liebbe

A is a metallic angle with a *true* straight outer edge, top flange very thin, fitted with spurs B and C, so that angle is portable and can be fixed in place on any board or table, and after board has been filled, removed and applied to another; can also be replaced; gives a *true* run to T. A few angles of different lengths would suffice for most offices. If you see fit should like to have you illustrate it. The scale facilitates matters in many cases. Yours truly,

H. F. LIEBBE, Architect.

## Corrections Regarding St. Louis City Hall Plans.

*Editors Inland Architect:* KANSAS CITY, March 24, 1890.

In the March edition of THE INLAND ARCHITECT we find that there has been quite a mistake made in placing the titles for our plans. The first and second floor plans marked "Civic" are correct, the transverse section, marked "Star and Crescent," should be marked "Civic;" the same applies to rear elevation on the same page. The perspective on the page with two floor plans marked "Faith" should be "Civic," in place of "Star and Crescent." Will you please make such corrections in your next issue and oblige

Yours respectfully, E. F. FASSETT.
A. J. RUSSELL.

*Editors Inland Architect:* KANSAS CITY, Mo., April 1, 1890.

We notice that our St. Louis City Hall design is classed as "sixth." This is true so far as Professor Ware's report is concerned, but as a matter of fact the final selection was made between Messrs. Eckel & Mann's design, marked "St. Louis, 1892," and James & James', marked "Unity." The full particulars of this final selection appeared in the St. Louis papers, and we should like to have what little merit is due us mentioned by you, as we undoubtedly secured the *second* and not the *sixth* place.

Yours faithfully, JAMES & JAMES.

As a matter of fact, three designs of the seven mentioned in Professor Ware's report, "Pro Patria," "St. Louis, 1892," and "Unity," were placed in Mr. McGrath's hands for consideration in regard to cost. The only statement we can make regarding the result must be the mayor's award as published, though Messrs. James & James may have learned the facts as they state them, and we give their statement the publicity asked for.—EDITORS INLAND ARCHITECT.

## Personal.

ARCHITECT D. H. BURNHAM, of Chicago, in crossing from platform to platform at a railway depot in a western town recently, mistaking the distance in the darkness, fell and broke his arm. The journey home and the severe nature of the fracture has made his recovery slow and painful.

NOTICING a query in an architectural journal regarding a protective paint or wash for exposed iron work, Mr. Howard Fleming, of New York, writes regarding his much celebrated preparation "Duresco" that "it has been used on iron as well as other metal rain-leaders with the very best results. It does not scale and will preserve the metal from rust." The virtues of "Duresco" as a damp preventive

for either inside or outside walls is generally known, but if its preservative features are as positive when applied to iron work, and Mr. Fleming's statements are always reliable, architects and engineers now have at hand a material long sought for.

Mr. W. M. Webster, well known to western architects through his six years' connection with the plumbing supply firm of Wolff Bros., of Chicago, and latterly manager of the firm's sales and exhibit department on Dearborn street, has taken a similar position with the Chicago department of the J. L. Mott Iron Works of New York, 311 Wabash avenue. Architects who call upon him will be entertained with the same cheerfulness and courtesy and receive the same intelligent explanation of sanitary appliances that they have been accustomed to, which has made their acquaintance with Mr. Webster enjoyable and of value.

Mr. Anson S. Hopkins, who for the past twelve years has been identified with the Henry Dibblee Company of Chicago, has been unanimously elected president and general manager of the company. From a comparatively small trade in fire-places, mantles, tiles, etc., the Henry Dibblee Company has grown to be the most extensive in the West. The goods in these lines range from moderate and low-priced work to the most elaborate and artistic special designs. It will be gratifying to the many friends Mr. Hopkins has made, both among architects and owners throughout the South and West, that he is at the head of this leading concern, and that the business of the past year has been the largest and most satisfactory in its history. At the recent annual meeting of the stockholders, among whom are some of the best known business men in Chicago and the West, the Messrs. O. S. A. and A. A. Sprague, of Sprague, Warner & Co.; A. C. Bartlett, of Hibbard, Spencer, Bartlett & Co.; C. H. Morse, of Fairbanks, Morse & Co.; D. S. Munger, of D. S. Munger & Co.; Henry Dibblee, of Dibblee & Manierre; Hon. Peter White, president of the First National Bank of Marquette, Mich., and others, Mr. Hopkins was unanimously tendered a vote of thanks for his efficient management.

## Our Illustrations.

Design for church; A. O. Elzner, architect, Cincinnati, Ohio.

Old colonial work; sketched by C. Bryant Schaefer, Chicago; two pages.

Residence of Mr. C. E. Hochstetter, Hyde Park, Kansas City, Mo.; Walter C. Root, architect.

Residence design for Mr. H. G. Dravo, Pittsburgh, Pa.; W. Albert Swasey, architect, St. Louis, Mo.

Buffalo Architectural Sketch Club competition for a country stable; first place, R. A. Greenfield; second place, Max G. Bierel; third place, John F. Jackson.

Custodial building, Illinois Asylum for Feeble Minded Children, Lincoln, Logan county, Ill.; Charles S. Frost, architect, Chicago. This building is planned to accommodate 100 inmates. Its cost complete, including furnishing and heating, will be $40,000. Its prominent features are large, congregate dormatories and day rooms and infirmary wards on each floor for the care of helpless cases. It will be lighted throughout by incandescent electric light. The building is located on the grounds now occupied by the State Institution for Feeble Minded at Lincoln, and is a special department of that institution, under the management of the same board of trustees.

PHOTOGRAVURE PLATES.

(*Issued only to subscribers for the Photogravure edition.*)

Residence at Washington, D. C.; Hornblower & Marshall, architects.

Cleveland Medical College, Cleveland, Ohio, Coburn & Barnum, architects.

Calvary Presbyterian church, Cleveland, Ohio; C. F. Schweinfurth, architect.

Interior view in National Bank of Commerce, Cleveland, Ohio; C. F. Schweinfurth, architect.

Residence for Mr. W. J. Morgan, Cleveland, Ohio, Euclid avenue, corner Brookfield street; Coburn & Barnum, architects.

View in reception room of summer residence of Hon. M. A. Hanna, Lake avenue, Cleveland, Ohio; C. F. Schweinfurth, architect.

Interiors in chapel of Sacred Heart convent, Maryville, Mo.; J. H. McNamara, architect, St. Louis, Mo. The building is 60x120 feet, and 35 feet high from floor to eave, and 72 feet high to the edge of the roof. The interior is divided into nave and aisles by two rows of clustered columns 20 feet high, having high molded bases and foliated capitals. Opposite each clustered column are foliated corbels supporting clustered shafts, having capitals corresponding with those of columns. The ceilings of both nave and aisles are groined, having molded and foliated eyes at the intersection of the ribs. The eyes of the aisle groining is 38 feet high from the floor, and those of the nave 56 feet high. The nave is 34 feet wide from column to column, and the aisle 12 feet from walls to column. The west end of the nave terminates in a sanctuary trigon in form, this being also groined and divided from the nave by a richly-molded arch rising to a height of 50 feet, and springing from double clusters of columns. The sanctuary is 34 feet wide and 34 feet deep from railing to wall. The main altar rises to a height of 26 feet. The aisles terminate in similar alcoves and receive the side altars. The eastern termination of the nave is a richly-decorated arch 34 feet span, and rises to a height of 24 feet above the tribune floor. The front of the tribune is a segment projecting into the chapel, richly panelled and covered. Under this arch stands the organ. Behind the tribune and still higher up is another gallery. Under the tribune is a panelled and molded double door that leads into the chapel from the convent. The design of this interior differs in treatment from that of the most familiar examples of the Gothic in this, that all the arches of nave and aisles, both direct and diagonal, spring from the capitals of the columns without the aid of the clear story. Again, the distance from walls to columns being only 12 feet, and that from cluster to cluster being 16 feet, it had to be treated differently from that of the usual designs of a square for aisles and a double square for naves. But these unusual distances were fixed by the arrangement of the double rows of stalls, and the architect had to accommodate his talents in design to them.

## Building Outlook.

Office of The Inland Architect,
Chicago, Ill., April 10, 1890.

Symptoms of improving activity in all branches of industry are apparent. In some quarters the fear is expressed that the industries are entering, or may soon enter upon an era of overproduction; but this anticipation is unwarranted, as is evinced by the fact that stocks of nearly all kinds of material and supplies are of very moderate proportions. The producing and consuming interests of the country are pretty evenly balanced just at present. Cost of production is increasing a little in some directions, and declining in others. The declining tendency in prices is particularly noticeable in the iron trade. An abundant supply of building material of all kinds is in readiness for distribution. The labor question is creating some uneasiness in many quarters, and while the attitude of laborers is somewhat threatening, there is good ground for the belief that the dreaded day for the inauguration of a general strike will come and go with less disturbance than is anticipated. Employers have manifested a creditable anxiety and willingness to meet all reasonable demands. Both sides have evinced a good deal of moderation, and there will be occasion for congratulation on both sides as soon as the issue is past. Lumber is in abundant supply, and southern products are being urged into northern markets with great persistency. Equipments and supplies of all kinds are manufactured and sold on a basis of last year's prices, with very few exceptions. The railroad companies are honestly endeavoring to live in harmony with each other, but in spite of their best efforts the necessity of some form of supervisory control is cropping out. The banking interests report an urgent demand for currency, and the rates of interest are rather higher than the profits of business warrant. A very urgent demand for money continues to drain eastern financial centers, and various legislative remedies have been suggested, with a view of tiding over the greater or less distress prevailing in agricultural localities especially. The industries are prospering East, West and South, and house building will be prosecuted this year with greater zeal than ever before known. No serious dangers threaten the prosperity of the country. The people have confidence in their ability to carve fortunes out of their opportunities, and a spirit of emulation and of energy is leading on to still greater achievement. Business men feel quite safe in the fact that cost of production will not fluctuate adversely to their interests. Extraordinary preparations are being made for greater outlays in all channels of activity.

## Synopsis of Building News.

**Baltimore, Md.**—Architect Charles L. Carson has plans for a five-story brick warehouse, 26 by 87 feet; cost $20,000.

Architect Jackson C. Gott has prepared plans for a three-story hotel, 100 by 100 feet, all modern improvements; cost $60,000.

The Immanuel Baptist congregation will erect a new church to cost about $45,000.

**Chicago, Ill.**—Architects Howe & Shelton: For L. A. Ender, two frame dwellings at Eggleston; furnaces, mantels, bathrooms, hardwood trimmed, stained and plate glass; making plans. For W. Witherwax, a two-story frame flat building at Garfield Park; bathrooms, closets, etc.

Architect H. I. Cobb is preparing plans for a ten-story club building to cost about $500,000. Steam heat, elevators, electric light, fireproof construction. It will contain Turkish baths, swimming bath, bowling alley, etc.

Architect William W. Clay: For H. H. Belding, a three-story store and lodge room, size 40 by 75 feet, to cost about $20,000. Bedford stone front, steam heat and the improvements; taking estimates.

Architect H. H. Boyington: For James Hood, a three-story flat building to cost about $20,000; Anderson pressed brick and Bedford stone. For W. J. Jefferson, a three-story flat building to cost $12,000; granite first story and pressed brick above.

Architect W. G. Barfield: For C. J. Phillips, a two-story residence to cost $6,000; furnace, bathrooms, closets, etc. For A. E. Goodrich, a two-story residence at Glen Ellyn; steam heat, mantels, bathrooms, closets, etc.

Architect C. H. Frost: For Bernard Steele and Isaac Wedcles, two three-story residences; blue Bedford stone fronts, hot water heating, plate and beveled glass, etc.; cost $10,000.

Architect E. D. Martin, Pullman Building: For J. A. Snyder, a two-story frame dwelling; furnace, mantels, bathroom, etc.; finishing plans.

Architects Burnham & Root: For E. S. Pike and others, fourteen-story hotel, to cost $1,000,000; steam heat, electric light, elevators, marble wainscoting and floors, to be thoroughly fire proof; letting contracts. Also finishing plans for Women's Christian Temperance building, to be built on La Salle and Monroe streets; it will be twelve stories high, and will be heated by steam, lighted by electricity, will have elevators, marble wainscoting, etc. For First Regiment armory building, to be built on Michigan avenue and Sixteenth street; letting contracts. For O. W. Potter, residence on Lakeshore Drive; granite front and tiled roof, steam heat, stained, plate and beveled glass, etc.; cost about $70,000. For W. J. Goudy, residence; to cost $25,000; stone front, tiled roof, steam heat and modern improvements.

Architects Adler & Sullivan are letting contracts for a ten-story market and cold storage building, to be erected on Canal, Lake, Randolph, and the river side; cost $1,200,000.

Architect Oliver W. Marble: For O. W. Mason, preparing plans for six three-story residences, to be built in Hyde Park; stone fronts, furnaces, bathrooms, closets, mantles, stained, plate and beveled glass; cost $30,000. For Clancy & Clancy, a block of five dwellings on Ellis avenue and Forty-fourth street; stone fronts, mantels, bathrooms, stained, plate and beveled glass, furnaces, etc.; cost $45,000; making plans. For John Smith, on Calumet avenue near Thirty-third street, a three-story residence, to cost $15,000; stained, plate and beveled glass, mantels, steam heat; working on plans.

Architect R. G. Penticost: For W. M. Cave, a two-story flat building; Bedford stone front, bathrooms, closets, mantels, two furnaces; taking figures.

Architects Treat & Foltz are letting contracts for a residence, to be built on Michigan avenue, for E. J. Lehmann; granite all round, slate roof, copper dormers, granite cornice, Romanesque style of architecture, steam heat, etc.; cost $175,000. For the same owner, taking figures for a four-story apartment building, to be built on Michigan avenue near Eighteenth street; Bedford stone front; cost $50,000; steam heat, hardwood finish and all the improvements. For the same owner, preparing plans for a four-story flat building, to be built on State near Twenty-third street; it will have a 200 foot front; Bedford stone, bathrooms, mantels, etc. Also taking estimates for a residence to be built on Goethe street near Astor; gray granite front and side, hot water heating, etc.; cost $15,000. Taking estimates for residence to be erected on Wellington avenue Lake Shore drive; pressed brick, stone and terra-cotta front; cost about $20,000. Also just

commenced work on remodeling building northeast corner of Randolph and Wabash avenue, for N. K. Fairbank; it will be made into a first-class office building; will put in two elevators, electric motor service, steam heat, hardwood finish throughout, and all the modern improvements. Treat & Foltz have taken a lease for the half of the top story of this building, where they can be found for the next five years.

Architect J. C. Swalm: For W. H. Cameron, ten two-story flats, to be built on Polk and Roby streets; bathrooms, closets, mantels, stained and beveled glass; cost about $35,000; preparing plans. For Mr. Worth, a two-story hotel and flat building at South Chicago; hot water, heating and modern improvements; making plans.

Architect H. R. Wilson is finishing plans for a block of five three-story residences to be built southeast corner of Grand boulevard and Forty-second place; stone fronts, steam heat and four furnaces, mantels, bathrooms, plate and beveled glass.

Architects Randak & Miller: For Mr. Plouzek, a four-story flat building; bathrooms, closets, mantels, stained glass; cost $8,000; letting contracts. For J. O. Barber, a flat building; frame, stone foundation; mantels, bathrooms, stained glass; finishing plans.

Architects Bell & Swift: For T. J. Bolger, a dwelling, to cost $5,000; furnace mantels, bathroom, stained glass, etc.; making plans. For K. H. Bell, a two-story stone front residence on Forty-seventh street; furnace, mantels, stained glass, etc.; making plans. Also remodeling four-story building into a six story hotel, to cost $20,000; elevator, steam heat and modern improvements; preparing plans.

Architect F. R. Schock: For M. Walsh, two three-story residences at 2509 and 2511 Indiana avenue; Bedford stone fronts, hot water heating, bathrooms, etc.; making plans. For Cicero & Proviso Street Railway Company, a generating plant, to cost $20,000; taking estimates. For T. O. Stokes, a dwelling at Lawndale; furnace, mantels, bathrooms, stained glass; making plans. For G. N. Seifert, a dwelling at Ridgeland; furnace, mantels, bathroom, stained glass; frame, stone basement; taking bids. Also taking bids for three-story pavillion and lodge-room on Thirty-first street, near Cottage Grove avenue; stone front, steam heat, marble floors and wainscoting, stained glass, etc.

Architect Oscar Cobb made plans for three-story opera house at Paris, Kentucky; steam heat, electric light, etc.; cost $40,000; taking estimates. Also making plans for remodeling theater at Evansville, Indiana; electric light, steam heat, etc.; cost $25,000.

Architect H. B. Seely: For J. R. Putnam, a six-story warehouse, corner Michigan and Lake; steam heat, elevators; cost about $200,000; making plans. For remodeling Crozier building at 150 Wabash avenue; cost $30,000. Will put on new front, steam heat, electric light, elevator, etc.; preparing plans. Also getting out plans for first-class six-story apartment house, to be built on a prominent corner on the South Side; elevators, steam heat, electric light, etc.; cost about $125,000. For A. T. Ewing, store and flat building, corner of Leavitt and Washburne avenue; bathrooms, mantels, dumb waiters, etc.; cost $50,000; making plans.

Architect C. R. Adams: For Congregational Church at Rogers Park; brick and stone, furnace, pews, stained glass, etc.; cost $10,000; making plans. For Sheridan Hall, at Rogers Park; brick and stone; cost $12,000; taking bids. Also getting out plans for Town Hall at Rogers Park; furnace, etc.

Architect M. F. McCarthy is preparing plans for theater and office building at St. Louis; steam heat, elevators, electric light, etc. Also working on plans for store and theater building on Milwaukee avenue; pressed brick, stone and terra-cotta. Making plans for flat building on Forty-sixth street and St. Lawrence avenue; stone front.

Architect C. T. Freigs is working on plans for store and office building, corner of Thirtieth and Butterfield streets; iron, stone and brick; bathrooms, closets, mantels; cost about $20,000.

Architect Alfred Smith: For John M. Dowling, a three-story residence; cost $37,000; cut stone all around and tiled roof; hot water heating, etc; taking estimates.

Architect J. A. Thair: For F. H. Hahn, a three-story residence on Grand boulevard and Thirty-sixth street; $20,000; stone front, hot water heating, etc.; letting contracts.

Architect L. B. Dixon: For Perry A. Hull, three residences on South Park avenue, to cost $25,000; stone fronts, furnaces, mantels, bathrooms; stained, plate and beveled glass; finishing plans. For Consumers Pure Ice Company, a factory on Thirty-fifth and Butler streets, 92 by 170 feet; cost $20,000; to make 120 tons of ice a day.

Architect M. E. Bell is finishing plans for a seven-story factory, to cost $30,000, to be built on Jackson near Clinton street; steam heat, elevator, etc. Also making plans for residence on North Side, to cost $80,000; stone all around; slate roof; hot water heating, copper bays and cornice; stained, plate and beveled glass, etc.

Architect W. A. Arnold: For J. Gartside, residence on Drexel boulevard, near Forty-third street; rock-faced, stone front, hot water heating, mantels, stained, plate and beveled glass, etc.; cost $15,000; preparing plans.

Architect F. B. Townsend is making plans for hotel at Glen Ellyn, Illinois, steam heat, etc.; cost $25,000.

Architect Clinton J. Warren is working on plans for six-story hotel; size 100 by 180 feet, to cost $400,000, to be built on Michigan avenue, near Twenty-third street; pressed brick, stone and terra-cotta front; to be fireproof, have two elevators, steam heat, electric light, marble vestibules, etc.

Architect W. D. Marks: For Marks Nathan, a society hall, 85 by 100 feet, to cost $30,000, on Jefferson and Twelfth streets; making plans.

Architect George Beaumont: For John McConnell, a two-story warehouse; 239 by 165 feet, to cost $16,000; common brick, elevator, vaults, steam heat, etc.

Architects Holabird & Roche: For H. T. Glover, an eight-story apartment building, corner Cottage Grove avenue and Fortieth street; steam heat, elevators, electric light, etc.; cost about $400,000; making plans.

Architects J. F. & J. P. Doerr: For Jacob Danz, a two-story, brownstone front residence on Washington boulevard; hot water heating, marble wainscoting and tiles, plate, beveled and colored glass; cost $13,000. For W. Praedig, two dwellings on Fiftieth street and Indiana avenue; stone front, furnaces, mantels, bathrooms, stained glass.

Architect F. L. Fry: For J. H. Stoner, at La Grange, a two-story frame residence; hot water heating, mantels, stained glass, gas fixtures, slate roof and porch; making plans.

Architect J. S. Woollacott: For C. W. Lasher, a three-story residence on Oakdale avenue, cut-stone front, hot water heating, stained, plate and beveled glass, etc.; cost $30,000; taking estimates.

Architect C. M. Palmer: For Potter Palmer, five four-story residences on State near Cedar streets; Kasota, Portage and Bedford stonefronts; furnaces, mantels, plate and beveled glass; cost $60,000. For George Straith, on Oakenwald avenue near Forty-fourth street, a three-story residence, Portage stone-front; hot water heating, wood mantels, plate and beveled glass. For W. L. Moss, a four-story flat building, on Ellis avenue near Forty-second street; Anderson pressed brick and Bedford stone; cost $15,000. Also making plans for $10,000 residence; furnace, mantels, bathrooms, etc.

**Cincinnati, Ohio.**—Reported by Lawrence Meudenhall:

The situation as stated in last issue remains unchanged, and, unless all signs fail. I think our contractors can count upon a busy season, at fair prices.

Architect George W. Rapp reports as follows: For T. M. Graydon, of Cincinnati, a residence; materials to be pressed brick; pine finish, wood mantels, furnaces, stained glass, tin roof, plumbing, etc.; cost $17,000.

Architect George Vogel reports: For Thomas James, a residence; materials, pressed brick; pine finish, wood mantels, hot water heating, laundry fixtures, tiling, stained glass and slate roof; cost $5,000. For A. Boehm, of Newport, Kentucky, a residence; materials, brick; pine finish, blinds, wood mantels, plumbing, grates, etc.; cost $3,000.

Architect Adam J. Bast reports: For Ashman & Glasgow, Eighth and Central avenue, a store building; materials, brick, iron; stove heat, blinds and tin roof; cost $4,500.

Architect James W. McLaughlin reports: For Joseph T. Carno, an eight-story store and office building; materials, stone, iron; elevators, electric bells, plate glass, etc.; cost $150,000.

Architects Glick & Bauderman, 116 York street, Newport, Kentucky, have drawn plans for a large three-story schoolhouse; materials, brick; furnaces, blackboards, slate roof, desks, iron stairs, etc.; cost $30,000. For Jacob Hahn, Monmouth street, Newport, a residence; materials, pressed brick; furnace, stained glass, terra-cotta, slate roof, etc.; cost $6,800. For John Heiber (care architect), a hotel of twelve rooms, at Melbourne, Kentucky; materials, brick; stoves, furniture, slate roof, etc.; cost $5,000.

Architect Gustave W. Drach reports: For Mr. J. M. King, Clifton, Ohio, a residence; materials, brick; pine finish, blinds, wood mantels, furnaces, stained glass, slate roof, etc.; cost $4,000.

Architect W. W. Franklin reports: For Otto Pfleger, Esq., attorney-at-law, a residence; pressed brick, hardwood mantels and finish, furnace, stained glass, tiling, electric bells, etc.; cost $6,000. Also for Miss H. Macke Clifton, a residence; brick, terra-cotta, pine finish, blinds, furnace, wood mantels, stained glass, slate roof, etc.; cost $5,000. Also for Mrs. John Kyle, a residence; pressed brick, pine finish, blinds, furnaces, wood mantels, electric bells, stained glass, etc.; cost $10,000.

Architect Lucien F. Plympton reports: For John G. Dinkelbiehler, a residence; pressed brick, pine finish, furnace, grates, dumb waiters, blinds, stained glass, etc.; cost $9,000.

Architect Adam J. Bast reports: For Gottlieb Muhlhauser, Esq., a flat building; brick and iron, grates, iron mantels, blinds, dumb waiters, etc.; cost $25,000.

Architect Louis Piket reports: For Mr. Peter Reuhl, Seventh and Main streets, a residence; brick, pine finish, furnace, wood mantels, laundry fixtures, tin roof, blinds, stained glass; cost $6,000.

Architect S. S. Godley reports: For E. C. Rychen, Price Hill, a residence; brick, hardwood finish, wood mantels, stained glass, slate roof, etc.; D. W. C. Bellville, Builders' Exchange, has the contract.

**Denver, Colo.**—For the Odd Fellows, Greeley, Colo., two-story pressed brick and stone hall, 50 by 100; cost $15,000. For A. Lewin, terrace of seven houses; cost $23,000. For G. M. Stone, two-story brick dwelling; cost $7,000. For A. Marks, a two-story brown stone and brick dwelling, to cost $9,000. For W. G. Nevin, brick dwelling; cost $6,000.

Architect A. M. Stuckert: For C. H. Conrad, Danville, Va., a brick and stone dwelling; slate roof, hardwood finish; will cost $50,000. For A. McClellan, Pueblo, a business building; brick and stone front; cost $30,000. For B. C. Patterson, Littleton, Colo.; brick and stone front building; cost $12,000.

Architects Lang & Pugh: For William Church, lava stone residence, to cost $40,000. Also lava stone stable, to cost $4,500. For A. M. Inman, dwelling; brick and lava stone; cost $5,500. For R. P. Lunt, dwelling; cost $10,000. For A. M. Juman, brick residence; cost $6,000.

Architects Varian & Sterner: For James G. Kilpatrick, two-story pressed brick and Arizona stone residence; cost $15,000. For J. B. Grant, dwelling; Longmont stone, tile roof; cost $15,000.

Architects Kirchner & Kirchner: For Denver Sewer Pipe and Manufacturing Company, a brick factory, to cost $15,000. For J. W. Hagus & Co., Meeker, Colo., a stone building; cost $7,500.

Architects Lee & Liden: For A. Mossier, three-story brick building; cost $10,000. For Western Farm Loan and Trust Company, three brick cottages; cost $8,000.

**Detroit, Mich.**—Architects Mortimer L. Smith & Son: For J. L. Hudson, an eight-story store and dwelling, size 100 by 180 feet; brick and stone, with tin roof; cost $300,000. For Wm. Peters, a two-story residence, size 26 by 90 feet; brick, with gravel roof; cost $5,000.

Architects Scott, Kamper & Scott: For Thos. Sevan, remodeling stone for café, with decorations; cost $10,000. For George H. Russell, a two-story frame dwelling, with shingle roof; cost $8,000.

Architects A. C. Varney & Co.: For J. C. Sabine, a two-story store and dwelling, size 36 by 54 feet, pressed brick; cost $5,000. For Mr. Dudley, a three-story store and dwelling, brick, flat roof, size 44 by 69 feet; cost $8,500. For John Phillips, three three-story brick and stone dwellings; cost $10,000.

Architects Donaldson & Meier: For the Detroit Boat Club, a frame boat house, size 60 by 100 feet; cost $7,500.

Architect John Lyman Faxon: For the First Congregational Society, a stone church and chapel, size 120 by 190 feet; cost $103,000.

Architects Gearing & Stratton: For D. W. Brooks, a two-story residence, brick and stone; cost $13,000.

Architect Peter Deitricks, Jr.: For John Zynda, a three-story brick brewery, size 48 by 112 feet, cost $25,000.

Architect Henry J. Rill: For R. Bell, a two-story dwelling, size 36 by 52 feet, brick, with gravel roof; cost $5,000.

Architect Walter Russel: For self, a three-story stone dwelling, size 24 by 42 feet; cost $12,000.

**Grand Rapids, Mich.**—Architect S. J. Osgood: For John Goldsmith, a five-story red brick and stone office building; cost $30,000.

Architects Mason & Rice, of Detroit: For Mr. Boyd Pautlind, a frame dwelling; cost $5,000.

Architect T. R. Williamson, of Philadelphia: For the Fuller estate, alterations and additions to the St. Denis Hotel; estimated cost $20,000.

**Johnstown, Pa.**—Architect Joseph Stillburg, of Pittsburgh, has plans for $70,000 hotel, $30,000 hall and a $10,000 store building, all to be erected this summer.

**Little Rock, Ark.**—Architect Thomas Harding: For W. H. Woodsmall, two-story brick veneered residence; cost $4,000; contract not let.

Architects Ortopp & Kusener: For National Bank of Commerce, three-story pressed brick bank building; cost $25,000.

Architect Fred J. H. Rickon: For W. S. Holt, two-story frame residence; cost $3,000. For C. F. Penzsl, three two-story frame dwellings; cost $2,200 each; contract not let. For Home Water Company, brick pump house; cost $6,000.

**Pittsburgh, Pa.**—Architects Bickel & Brennan: For John Goff, Jr., four handsome dwellings, brick with stone fronts.

Architect J. T. Steen: For the Hon. John Dalzell, an eight-story law office building, stone and brick with stone trimmings, fireproof throughout; estimated cost $130,000.

Architect Joseph Anglin has drawn plans for the remodeling of the Allegheny City Hall; the work will cost about $100,000; the building to be three-story, size 180 by 165 feet.

Architect F. J. Osterling: For the Central District and Printing Telegraph Co., a new seven-story building, size 66 by 100 feet, pressed brick with brown stone trimmings; cost $165,000.

Architect Joseph Stillburg: For Mrs. J. M. Gusky, a two-story stone residence, terra-cotta, lumber partition, incandescent lighting, marble tile, etc.; cost $125,000. For B. N. Jacob, a two-story residence, brick and stone; cost $7,000. For N. Kelly, of Allegheny, a four-story warehouse, size 31 by 55 feet, brick and stone; cost $3,000. For the Pabst Brewing Co., a storage warehouse; cost $6,000. For the S. S. Marvin Cracker Co., a three-story brick stable, 45 by 120 feet, for fifty horses; cost $20,000.

**Seattle, Wash.**—Architect Nestor: For T. D. Hinkley, a five-story building, brick, stone and terra-cotta; cost $125,000.

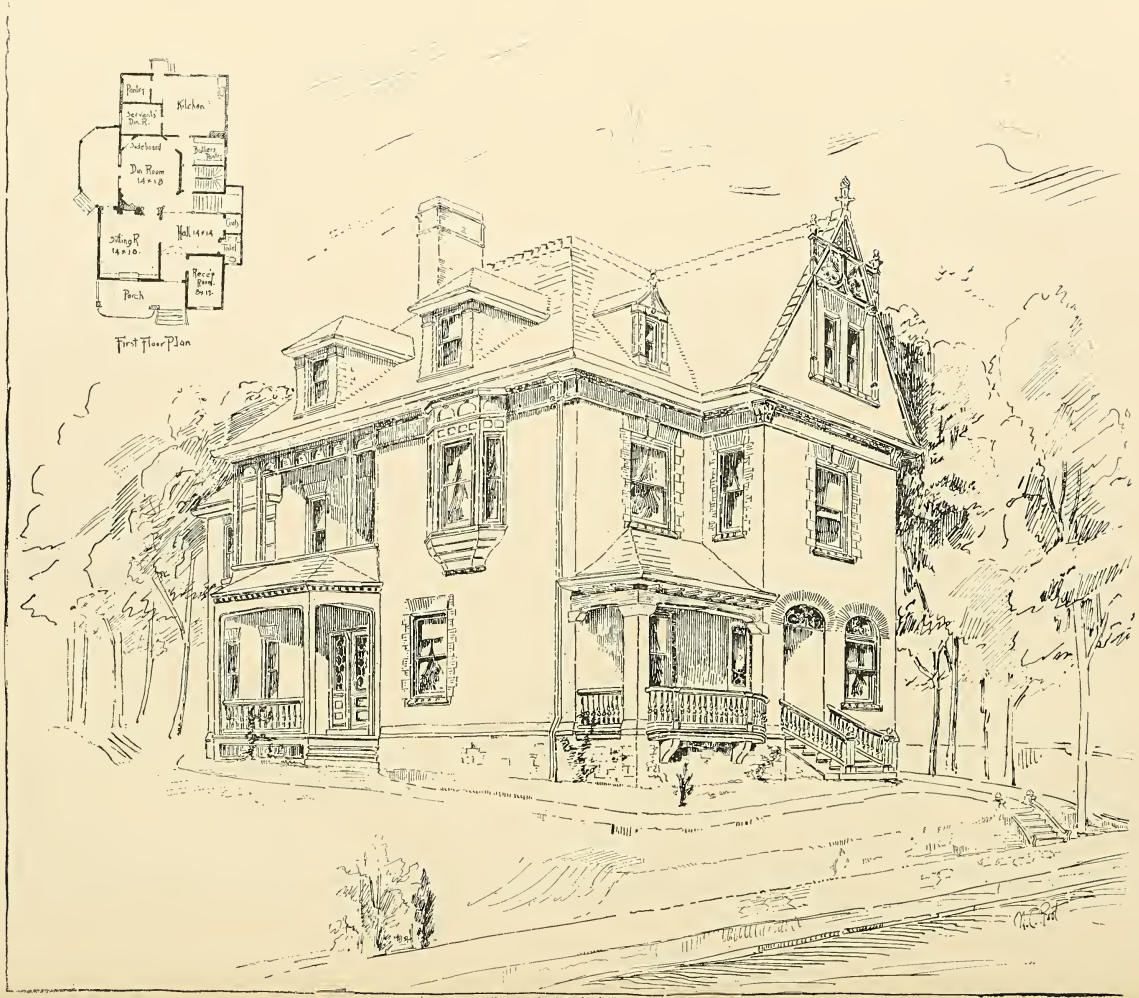
A Masonic temple to cost $200,000 will be erected here this summer.

**Sioux Falls, S. Dak.**—The Folsom District will erect a new school house, to cost $23,000. Plans have been accepted, and work will be commenced about May 1.

**Spokane Falls, Wash.**—The Northern Pacific Railway Company have accepted plans for a large depot; the building is to be 36 by 40 feet, brick with stone trimmings.

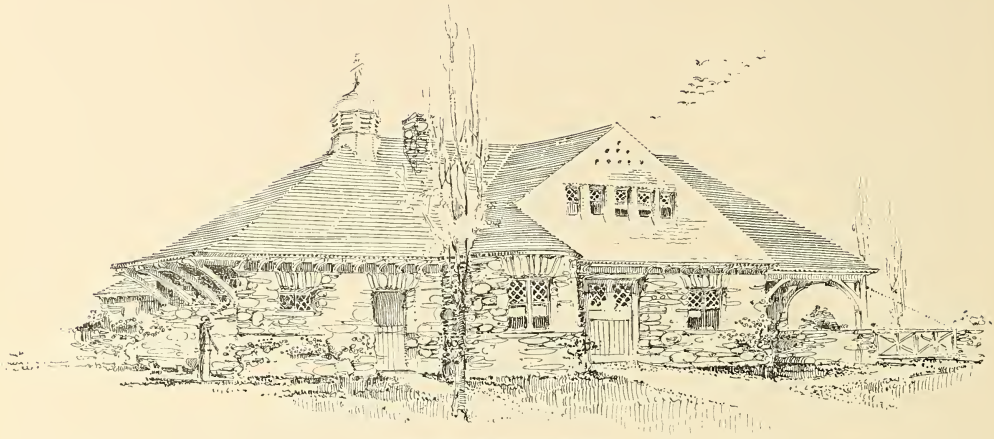
**Springfield, Ill.**—Architect George H. Helmle: For Dr. Walter Ryan, a two-story dwelling, size 40 by 60 feet, pressed brick and stone; cost $6,500. For Fred H. Foster, of Warren City, a two-story frame dwelling, size 34 by 54 feet; cost $5,500. For Rev. Dr. Logan, a two-story frame dwelling, size 34 by 40 feet; cost $4,000. For Charles Ryan, a two-story frame dwelling, size 34 by 48 feet; cost $4,200. For George H. Souther, a two-story frame dwelling, size 32 by 56 feet; cost $4,000. For the Baptist Church Society, a frame mission church, size 36 by 50 feet; cost $3,500.

**Warren, Ohio.**—Architects Weary & Kramer, of Akron, are preparing plans for a large brick block, to be erected this summer, for Messrs Lamb & Strong; contracts not let.

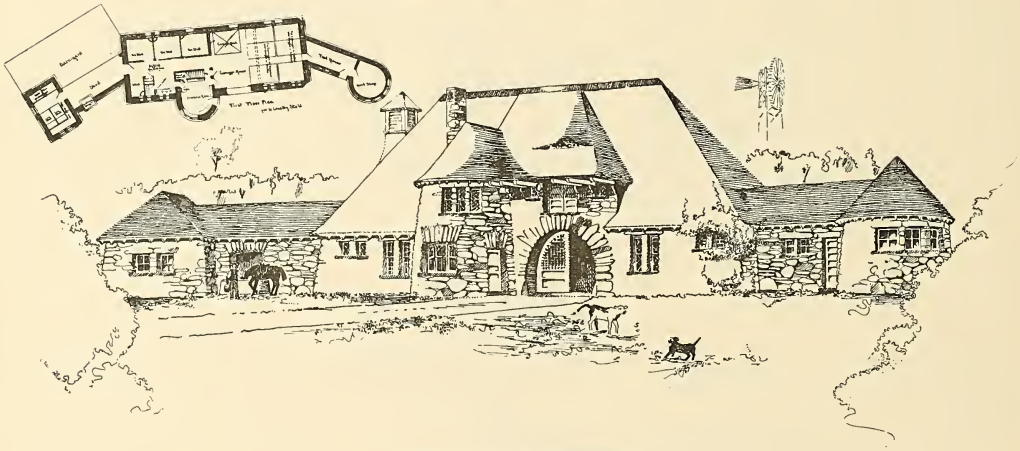



Dwelling of C.E. Hochstetter Esq
Hyde Park —— Kansas City, Mo

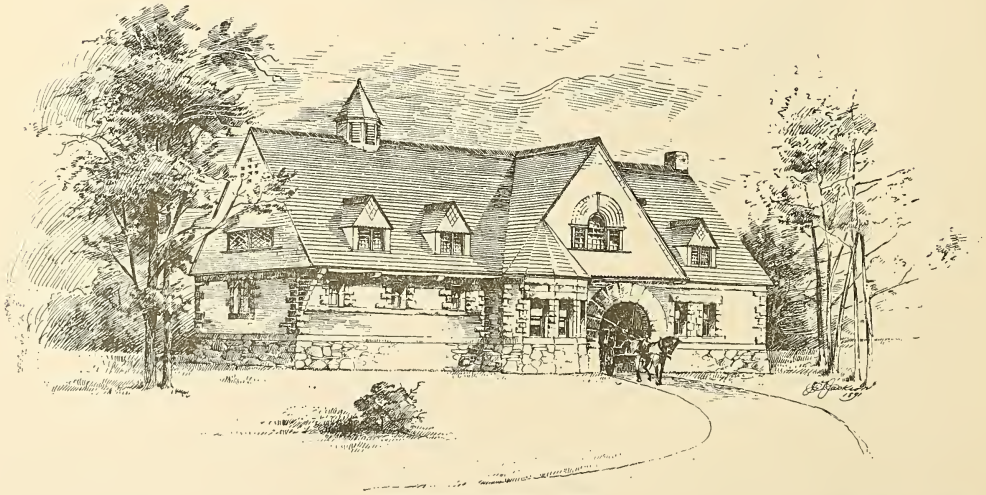
W.C. Root, Arch't, K.C



SECOND PLACE, MAX G. BIEREL.

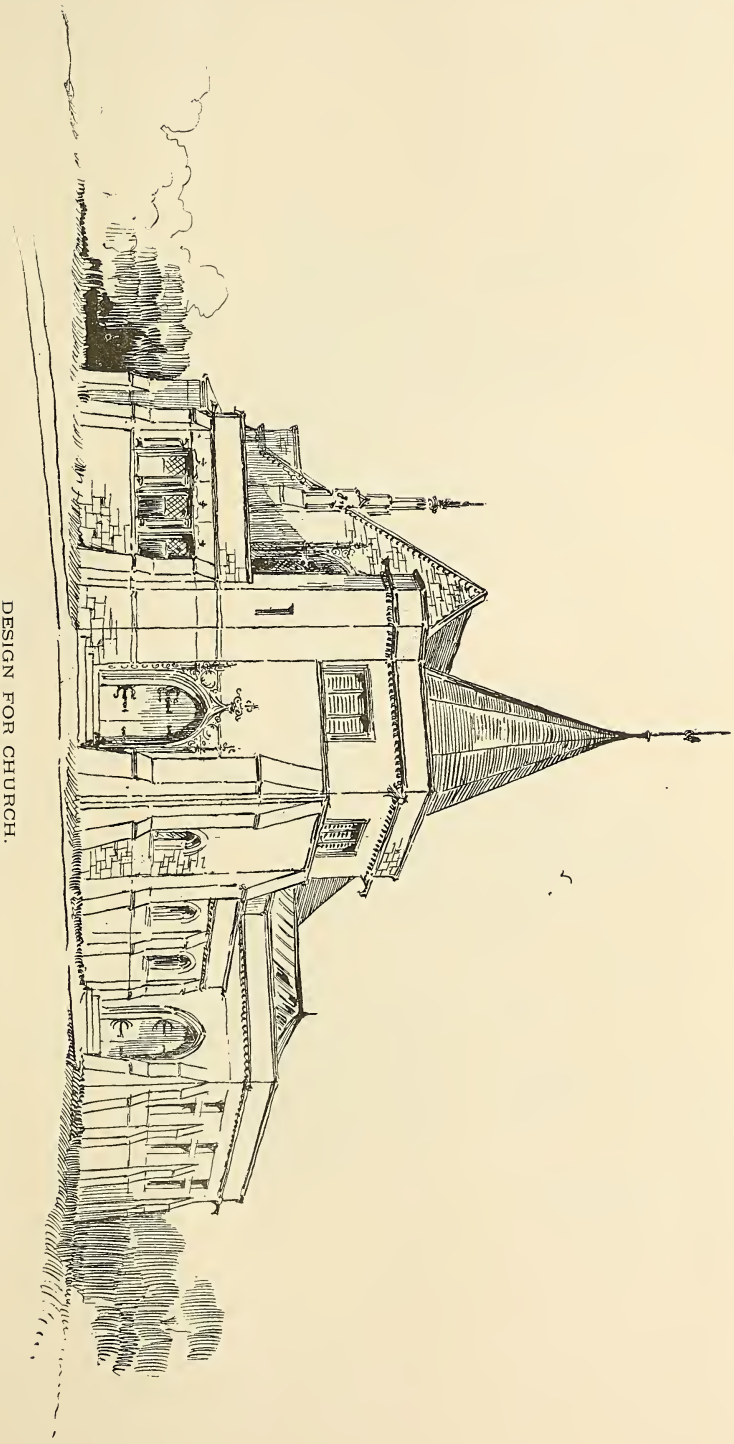


FIRST PLACE, R. A. GREENFIELD.



THIRD PLACE, JOHN F. JACKSON.

BUFFALO ARCHITECTURAL SKETCH CLUB COMPETITION FOR A COUNTRY STABLE.

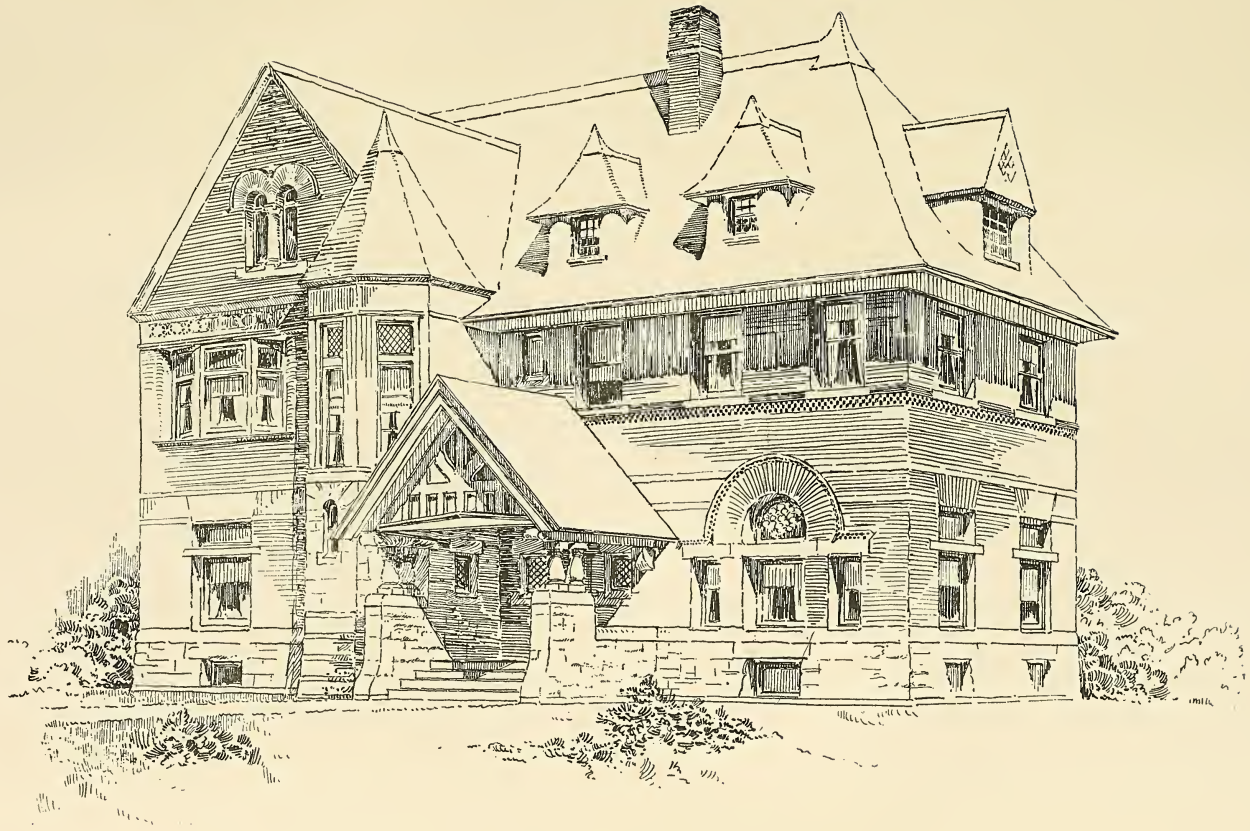


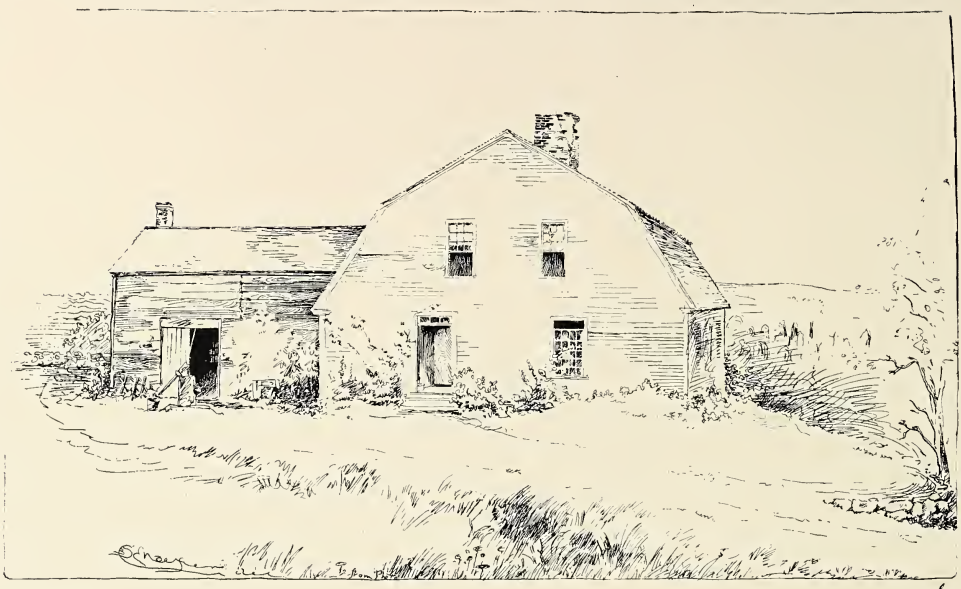
DESIGN FOR CHURCH.

A. O. ELZNER, ARCHITECT, CINCINNATI, O.

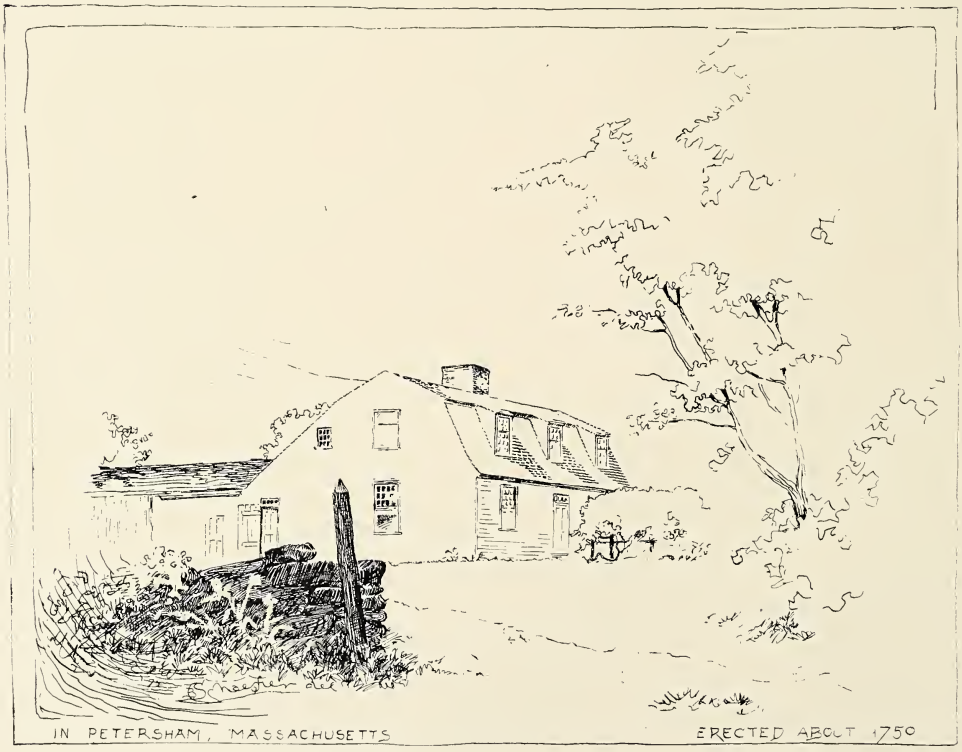
RESIDENCE DESIGN FOR H·G·DRAVO ESQ·PITTSBURCH·PA·

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Old House in Petersham, Mass. Erected 1742

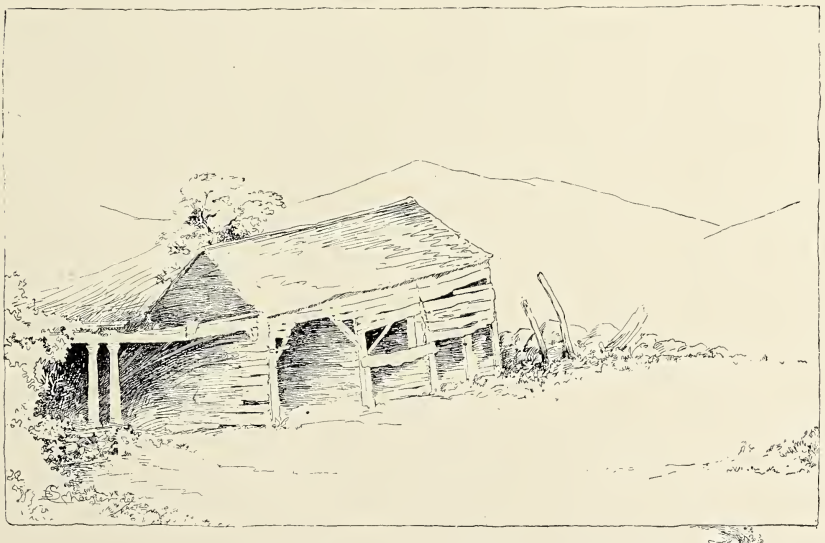


IN PETERSHAM, MASSACHUSETTS ERECTED ABOUT 1750

OLD COL

SKETCHED BY C. F

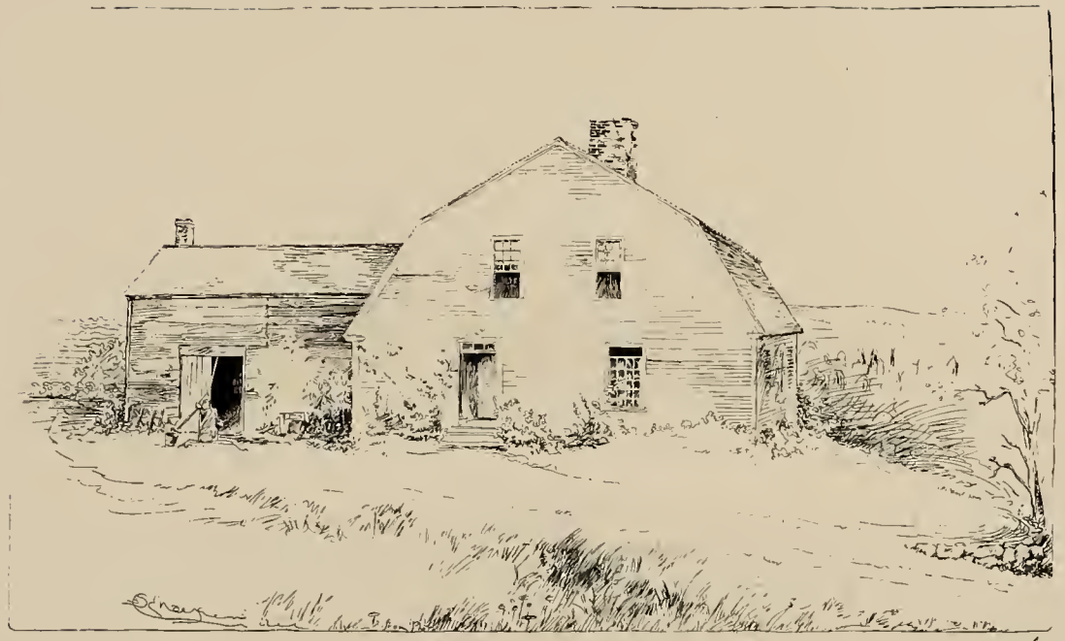




Sketch in New Hampshire

L WORK.

SCHAEFER, CHICAGO.



Old House in Petersham Mass Erected 1742



IN PETERSHAM, MASSACHUSETTS ERECTED ABOUT 1750

# OLD COLONIAL WORK.

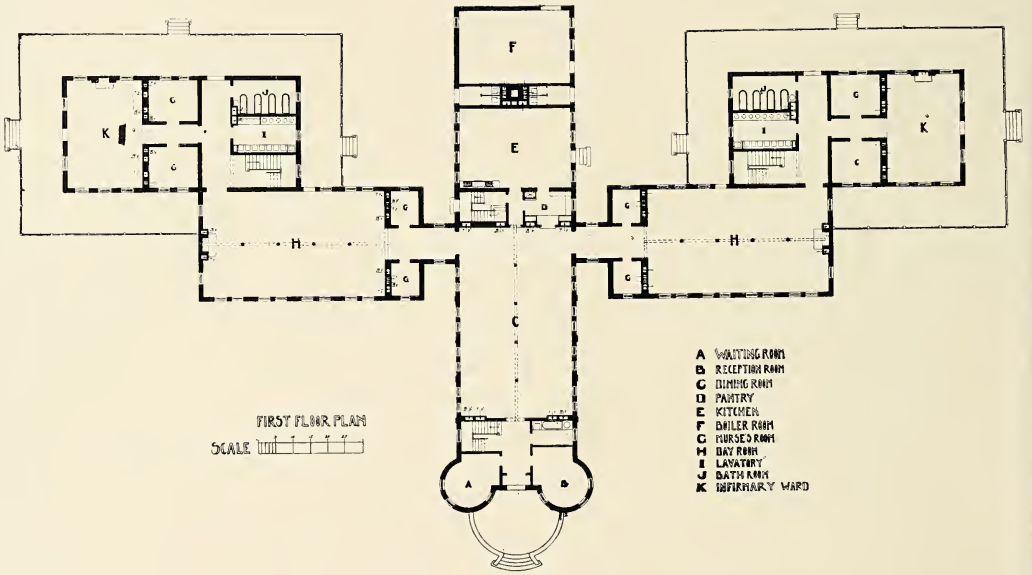
SKETCHED BY C. BUNT SCHAEFER, CHICAGO.







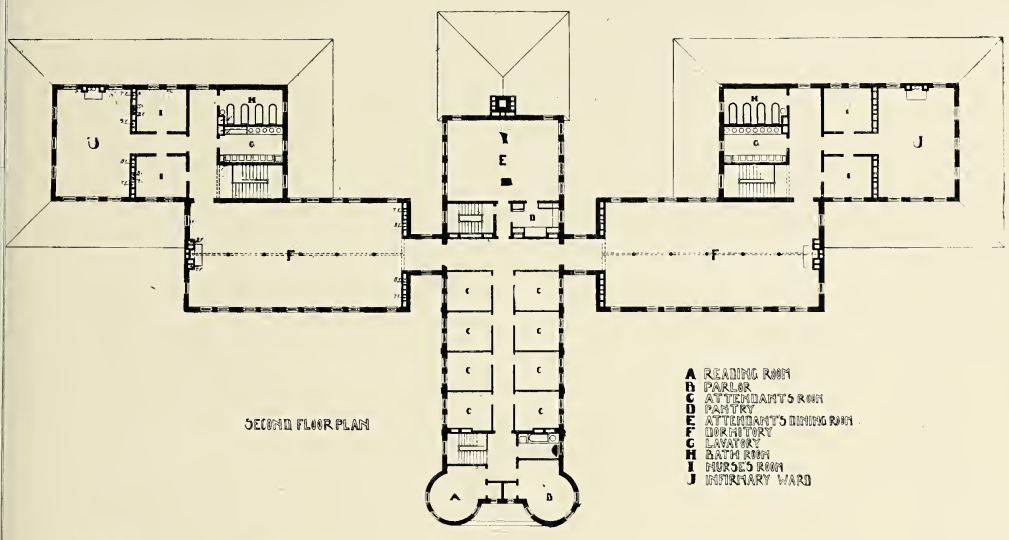
Sketched in New Hampshire

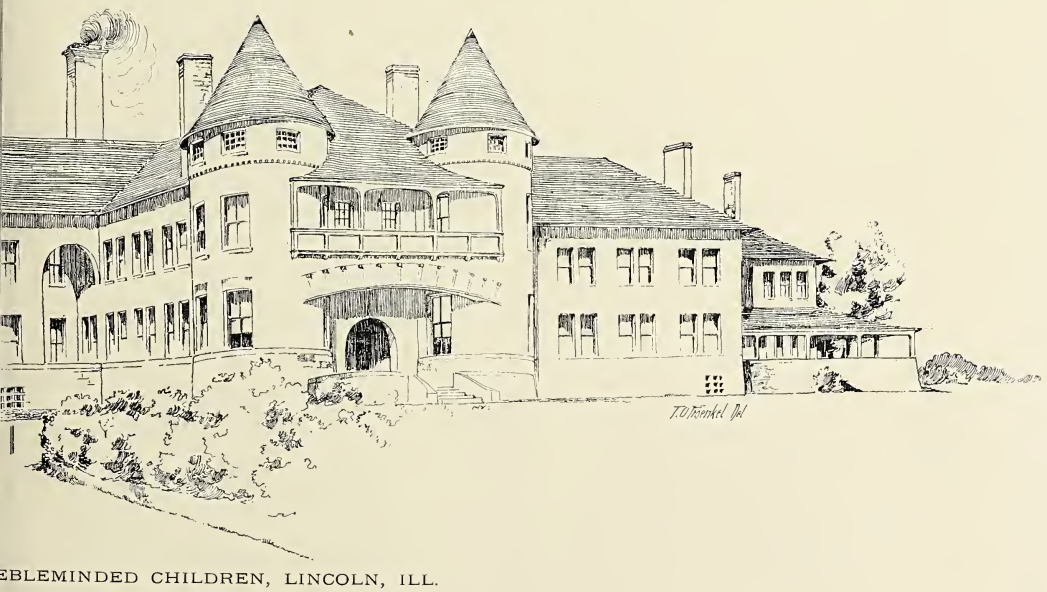





CUSTODIAL BUILDING, ASYLUM FOR F

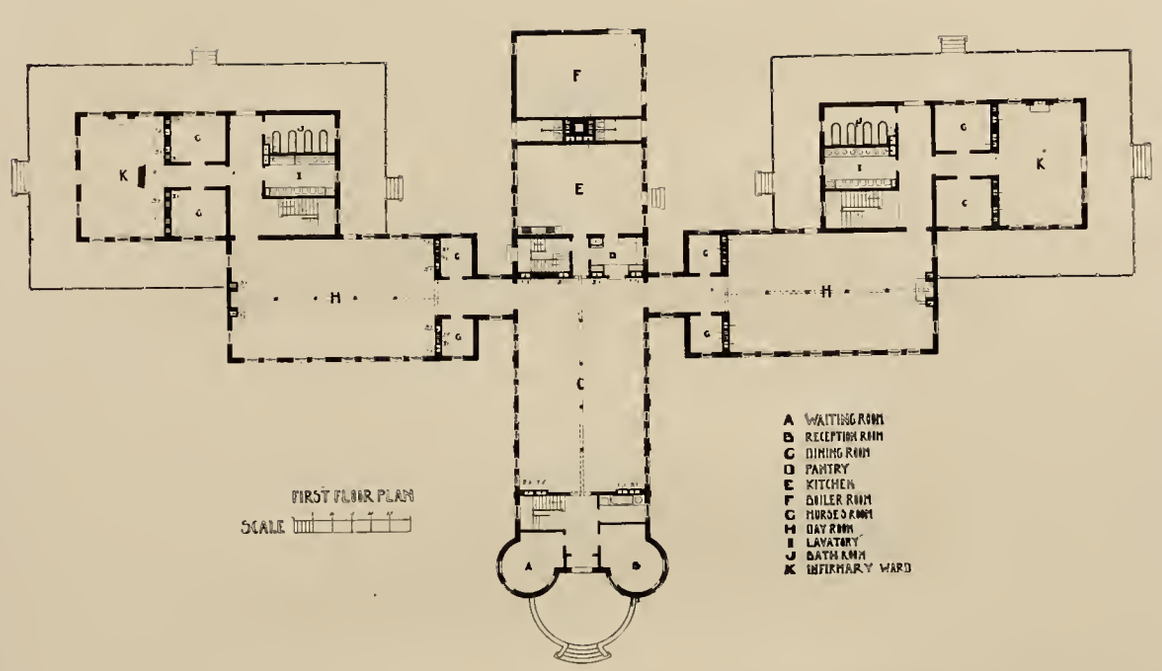
CHARLES S. FROST

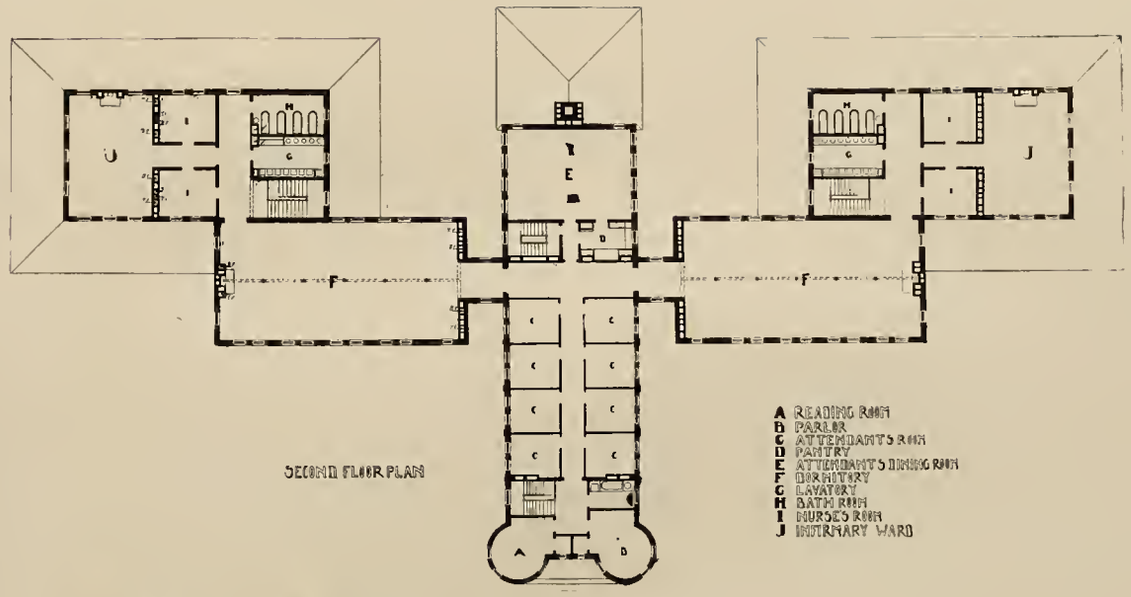


EBLEMINDED CHILDREN, LINCOLN, ILL.

RCHITECT, CHICAGO.






CUSTODIAL BUILDING, ASYLUM FOR FEEBLEMINDED CHILDREN, LINCOLN, ILL.

CHARLES S. FROST, ARCHITECT, CHICAGO.

# THE INLAND ARCHITECT AND NEWS RECORD

Vol. XV. MAY, 1890. No. 4


MAY, 1890.


# THE INLAND ARCHITECT

AND NEWS RECORD.

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CONSTRUCTION, DECORATION AND FURNISHING

IN THE WEST.

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**An Architects' Registration Act Passed in Ontario.**

A bill entitled the "Ontario Architects Act" has passed the Ontario legislature and is the first recognition the profession of architecture has received from legislative bodies in this country. While the act, which is printed as passed upon another page of this number, is not as it was first outlined and approved by the Ontario association, it is still a valuable aid to correct practice and a protection to legitimate practitioners. We are of the opinion, and in fact, the friends of the bill in its passage intimated that when the architects had practiced under its provisions and the hoped for elevation of the profession through it had been accomplished to some degree, further powers would be given as originally asked for. We heartily congratulate the profession in Ontario upon the passage of this bill, which gives them all that architects in the United States can hope for at present from state legislatures, and much more than the registration act now before the British parliament asks for. Organization under this act should be completed at once and its provisions so wisely carried out that the association will be beyond criticism when in the future it asks for further confidence and professional power.

**The Strike of Carpenters and the Situation in Chicago.**

We have given in the news department, with some attempt at detail, a statement of the condition of labor in the building trades in Chicago at the present writing. We know that much therein will seem incorrect to those who have read the daily papers during the past month; but with better facilities for obtaining the exact facts and carefully examining the situation, we are in a better position to judge than the daily press can possibly be. In this statement we neither extenuate nor seek to excuse. The unions claim the right to organize, which we do not deny. They also claim the right, the necessity of which we do deny, to obtain arbitrary control of all labor in their particular line. In the strike of the Carpenters' Union they emulate the bricklayers' organization of Chicago, which is probably the most arbitrary as well as strongest and well managed union in the United States. While the movement of both capital and labor is general toward organization, neither those combinations of capital nor of labor that disregard the rights of others will succeed in the long run. Trusts will be declared illegal and be suppressed, and labor unions that are practically conspiracies against all interests outside of their combinations will be likewise abolished, though each will flourish till their tyranny of action and the evil results of their control will lead to their abolition. In Chicago the carpenters' strike has, as President Goldie said in a late address, been one of the "most useless, uncalled for, unnecessary, blind, imaginative" of all the strikes that city has known. While a stipulation regarding hours and wages was made, these were practically in operation before, the entire matter being summed up in the word "recognition." We have explained elsewhere what the union definition of the word is. The membership of the Carpenters' Association, the men who have built the city, are now and will continue to stand upon the principle of personal liberty, both for their own benefit and that of the workmen who wish to enjoy the same privilege, which is the foundation of the constitution under which they live. The building trades in other cities may depend upon them to maintain

this position, for they are determined to a man to either do so or go out of business. The architects and owners, we are glad to see, are in thorough accord with the position taken by this association, urging them to maintain their rights as citizens in the control of their business. There is a movement on foot among those journeymen who have and still do depend upon their skill rather than the strength of a union to secure them work at good wages, to establish a union benevolent in form and for the improvement of the craft, which we would be glad to see successful. For unions of workmen are proper and necessary, but it will take many years for the American public to look upon a union with anything but distrust through the example given by those that have made strikes and disturbances their chief object.

A Trade School Inaugurated by the Chicago Exchange.

It is a hopeful sign in view of the labor disturbances throughout the country, which in a large measure, where not entirely, are caused by the labor unions wishing to obtain recognition which to them means arbitrary control, that philanthropic and thinking men are uniting in the movement toward the establishment of trade schools. Following Colonel Auchmuty's work in New York and Philadelphia is the proposed establishment of such a school in Chicago, the progress of which we give in full elsewhere in this number. This Exchange, numerically the largest in the country and probably as wealthy as any, has before it a work which cannot be performed by resolution and passive approval, but by the contribution of money and time for its consummation. As a reward it will have honor which it may not care for, and educated workmen to employ which will more than repay its members as individuals for any outlay in hard cash they may have contributed. The best indication that the Chicago Exchange has commenced the work in earnest and will carry it through speedily is the raising of $2,000 in its support in a few minutes by passing a hat at a meeting at which not one-tenth of the Exchange membership were present. It cannot now withdraw from the work with honor any more than it can expend the large surplus in the treasury in a more creditable and eventually remunerative enterprise. It is a significant fact, indicative of the complex condition of the labor problem of the present day, that the meeting of the Exchange which gathered to receive the report upon a training school was sandwiched between meetings held in the same building by the carpenters' association in conference with representatives of their striking employés.

The Lewis Polytechnic School at Chicago.

Following the establishment of a trade school will be the organization of a polytechnic school, the inception of the latter being prior to that of the others. Thirty-five years ago a citizen of Chicago, Mr. John Lewis, conceived the idea and arranged by will for its carrying out. This bequest was left in a brother's hands, Mr. Allan C. Lewis, and he in turn died and left it to a brother, Mr. Henry F. Lewis, who, with Messrs. John M. Adsit and Hugh A. White, were appointed trustees to carry out the provisions of the original bequest. The original bequest was $150,000. Allan C. Lewis, when he died thirteen years ago, left it $400,000, directing that the school should be erected when this sum had doubled. It now amounts to $1,000,000, and as soon as some of the provisions of the will are regulated, such as a proper site being secured, that designated by the will, through change in surroundings, being undesirable, the work will be carried out. Thus Chicago has already established the primary department of trade training in the work of the manual training school. In the Builders' and Traders' Exchange trade school project the high school department is secured, while the Lewis Polytechnic School will provide for those who wish to further advance in these lines or seek for a scientific training. While each of these institutions will be, to a degree, limited in capacity and private in management, they will do a vast amount of good to the coming generations, and their future growth can no more be estimated than can that of this great central portion of the greatest civilization the world has seen. The great educational center of the future is undoubtedly here, and the progressiveness of the people will make such a consummation surpass all that has gone before it. The example of such private enterprises will show their necessity and value and lead to the establishment of similar schools by the state or national government as a part of the public school system, which, next to the national constitution, is the foundation upon which our republic rests and sustains its place among the nations.

A Proposed Model Law Governing Building.

The subject of fires, their causes and prevention, broadly stated, will occupy the attention of the National Association of Fire Engineers, at their annual convention at Detroit, August 12 next, and the discussion will be held under twenty-one heads, each topic dealing with some phase of the general subject of fires. One subject which should attract the attention of architects is number six in the programme. It is given in the programme as follows :

*Topic No. 6.*—(*a*) Flues and fire hearths—How should they be built? (*b*) Which is the best economy, to continue building as now done and trust to the fire department; or put up better buildings that will not destroy each other, but will burn out individually? (*c*) Should firemen take an active part in urging that better methods of construction be adopted, and in what way can they do this best? Is it policy for the National Association to urge that the architects and the builders' associations frame a model building law? (*d*) Will it cause the public to adopt better methods of building if the chiefs, in making their reports, would adopt the plan of reporting, in addition to the total loss, also the probable loss that would have occurred if the building, in which the fire originated, had been built with adequate fire walls or in a proper manner? (*e*) Slow combustion buildings. To what extent has their construction reduced the fire hazard in cities?—Henry A. Goetz, of New Albany, Indiana.

It does not seem improper that the American Institute of Architects and the National Association of Builders should take some such action, if requested to do so, as is suggested in regard to a model building law. The evils of existing building laws are well known. That of Kentucky just passed is said by architects and builders to be impracticable, even using names and terms unknown to the profession, besides imposing hardships that will have the effect of retarding rather than stimulating building. Boston is now revising an admittedly bad law, New York has had a revision committee to work for six months; St. Paul, Minneapolis, Philadelphia and Baltimore are at work seeking to improve the existing laws. The State of New York has just passed a law creating a commission to frame a new law, such action showing the necessity for just such a model, that none could frame with such freedom from error as the national associations mentioned. Such a model would be immediately indorsed by underwriters, by a difference in rates in its favor, and in this way only can we ever hope to have any improvement in the fire situation. It is certain that fire insurance is too expensive under the present method of rating, but it can hardly be less so until the building laws are so revised that a better class of buildings be erected, especially in the smaller towns, where fireproof buildings are seldom built.

## Romanesque Architecture.*

### Chapter XV.

THE CHURCH OF FONTEVRAULT — CHURCH OF SAUMUR—THE CHURCH OF PUY-EN-VELAY (FRANCE).

THE Abbey church of Fontevrault was built at nearly the same time as the cathedral at Angoulême, from 1101 to 1120.

The plan of those two churches is identical, except the choir; the cupolas are alike, and certainly derived from those of St. Front, as far as the architectural part and mode of construction is concerned. However, the progress which we have observed at Cahors and Angoulême is still more noticeable, and a state of perfection more nearly reached, by the increasing ability of the Romanesque architects; the piers, the arch ribs and the pendentives have now only the necessary divisions, the thrust and resistance are skillfully calculated, and the buttresses placed at necessary points are decreased in size, so as to permit a desirable decrease in the thickness of the outside walls.

The details of construction and the carved ornamentation are more refined and show an art approaching its highest development, which was soon to be the starting point of a new style.

The choir of Fontevrault is less ancient than the nave. It is a different expression of the Romanesque architecture, in which can

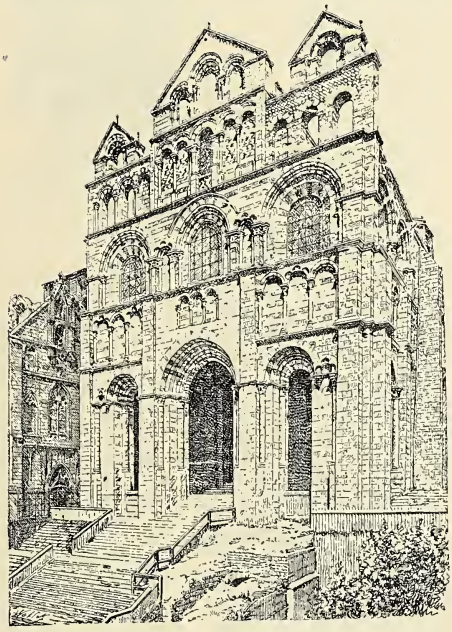


Fig. 178.

easily be recognized the arrangement of the churches of Auvergne, for this part of the church bears a very strong resemblance to the choir of the church of St. Paul at Issoire.

But the manner, then new, in which the cross of the transept was vaulted was particularly remarkable. This is, properly speaking, no longer a cupola, but is a spherical vault cut by the four groins of the transept of the arms of the cross. In a word, it is a ribbed vault, the thrust of which is less energetic than that of the cupola, because of the lesser weight. The construction is very simple, for each course of stone forming a concave keystone, the centers are reduced to their simplest expression. The springing points and this annular vault are marked by capitals a little higher than those which receive the arch ribs of the cross.

We have already seen the mode of construction of the vaults. The change from the vaulted cupola to vaults resting on crossed ribs was shown some years after the erection of the church of Fontevrault in the church of St. Peter at Saumur, with much greater clearness than in the church of St. Avit-Sénieur.

This last system, which gave much greater lightness to the vaults, and necessitated less prominent ribs and points of support, rapidly developed. (Fig. 178.)

Among the churches with cupolas we must not fail to mention the church of Notre-Dame at Puy-en-Velay. This originated in the same type, but has a peculiar characteristic.

The nave terminating in an apse, without smaller apsides, consists of a series of vaulted bays, as the square of the transept is ordinarily arranged in Romanesque churches. That is, each bay is surrounded by an octagonal drum on a square plan, connected by very ingeniously arranged corbeling and by an elegant octagonal cupola, which recalls that of St. Vitelle at Ravenna, or the palatine church of Aix-la-Chapelle; the cupola, surmounting the cross of the transept, is arranged the same way, but more elevated above the sloping roof, which covers those of the nave. The transepts are covered with barreled vaults. (Fig. 179.)

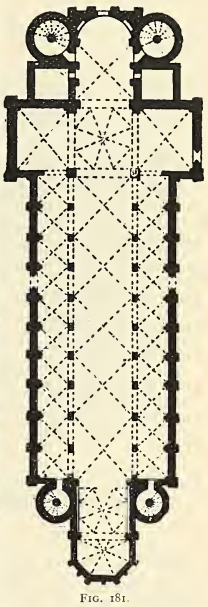


Fig. 181.

According to Viollet-Leduc, Notre Dame du Puy is unique in its arrangement. "Through a lofty porch, like an immense loggia, the inclosure of the church is entered, and, by a flight of stairs, one can arrive before the high altar. These steps are continued for a distance into the street, where the portals are. This strange arrangement was made to permit the number of pilgrims that visited Notre Dame du Puy to go in a procession even to the holy relics. The cathedral of Puy presents some of the peculiarities of an edifice of the eleventh century. The three eastern bays are round arched and the others are pointed arches, finished about the middle of the twelfth century, and crowned by octagonal cupolas. The external walls are composed of courses of white sandstone and black lava, so laid as to form great mosaics."

The belfry recalls those of Limousin and Perigueux, especially that of St. Leonard and Brantôme. It is composed at the base of a square wall, relieved by four piers, separated by arches bearing barreled vaults, perpendicular to the four sides of this wall; on the barreled vaults rest the upper stories, which grow smaller at each floor by the width of the walls of the preceding story.

### Chapter XVI.

CHURCH AT WORMS (HESSE-DARMSTADT)—CHURCH AT SPIRE (BAVARIA).

The first half of the twelfth century must be looked upon as an epoch of transition. To this word transition is given a broader significance than is usually attributed to it by modern archæologists, for one cannot admit that the gradual improvement and perfecting which mark the middle of the twelfth century were alone shown in the changes pertaining to the form of the arch.

Round or pointed arches have a very ancient origin, and if the best authorities can be believed, the Persians used the pointed arch even before the Roman epoch. Moreover, the pointed arch was in use not as an habitual form, and still less as a system, but as a means, as an expedient of construction in edifices erected in Provence in the early part of the eleventh century. Examples of groined arches and arcades, where the pointed arch is used, abound in the most ancient Romanesque edifices of Limousin and Poitou; one often sees this form and the round arch used simultaneously in the same edifice.

The transition ought to be understood in its largest and most general sense, for it would seem that that epoch was characterized by the transformation of the system of vaulting churches, a fact more important than the form of the arch, which is only a small detail in a vast whole.

This grand movement in art sprung from the general application of the mode of construction of churches with cupolas, which system

* "L'Architecture Romane," by Edouard Corroyer, Paris. Translated and abridged from the French for THE INLAND ARCHITECT, by W. A. Otis, architect. Commenced Vol. XIII, No. 3

had so greatly modified in the first years of the eleventh century the art of building in the West, of which St. Front is an admirable example.

We know the different stages that have been passed from the building of the Holy Apostles at Constantinople to the erection of the

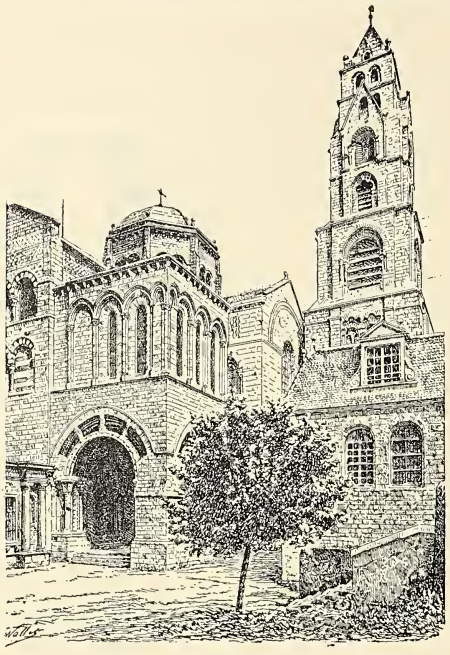


Fig. 179.

church of St. Front in France. We know with what marvelous skill the architects of Aquitania appropriated Byzantine traditions, applying them to their own resources, and wisely using them with material which they had at their disposal; we have followed the progress realized by their Romanesque successors from the church of Perigueux to that of Fontevrault, and finally we have noticed the modifications, made with scientific skill, in the construction of vaults from the cupola of St. Front to the strongly accentuated pointed vaulting at St. Avit and at Saumur.

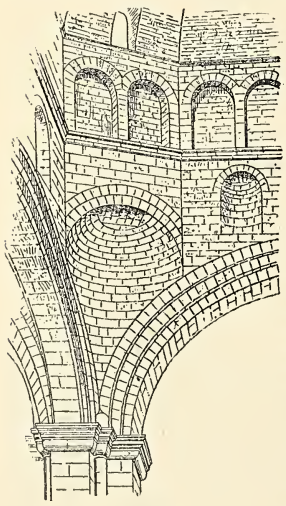


Fig. 182.

This new system of construction, having for its object the lightening of the vaults, led naturally to considerable changes. These consisted in diminishing the points of supports, making them more frail and more numerous. Between the principal piers they erected lighter pillars, the former united by a superimposed arcade, and the latter by a heavy arch connecting with the vault and helping to strengthen the principal piers.

The groined vault, very concave and recalling the form of the cupola or annular vaults, places the weight on the principal piers, which are solidly counter-buttressed by lateral vaults. They are arranged on a square plan, a reminiscence or rather a traditional imitation of the churches with cupolas built on a similar plan. Built in the middle of the twelfth century or about that time, the churches at Worms and at Spire in Germany, of St. Ambroise at Milan and of the Trinity at Caen, furnish us with most interesting examples of the epoch of transformation which was a preparation for the monumental revolution of the thirteenth century. (Fig. 181.)

The nave of the cathedral at Worms, Violet-Leduc states, a nave which dates from the first half of the twelfth century, is covered by a grand groined vault without arch ribs, which rises from a square plan. The intermediate piers, forming compartments in the side aisles, are also covered with groined arches which follow Romanesque-Byzantine traditions. (Fig. 182.)

The cathedral at Worms has three naves, recalling the arrangement of the basilicas, and the naves abut on a transept, giving to the edifice the form of a Latin cross. The church has two choirs, one at the east which ends in a hemicycle on the interior, and whose exterior face is square; the other at the west is formed by a small polygonal spire.

The cupola which crowns the cross of the transept is constructed according to the Græco-Byzantine ideas; it especially recalls the cupolas of Daphni near Athens, and even more strongly yet that of St. Nicodemus, by the arrangement of the niches, covered with quarter spherical vaults, which bring the cupola by means of an octagon into harmony with a square plan.

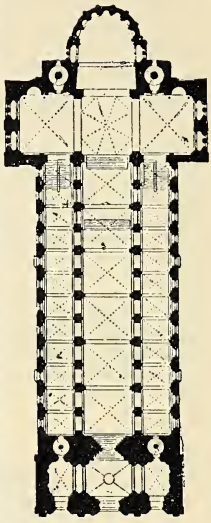


Fig. 183.

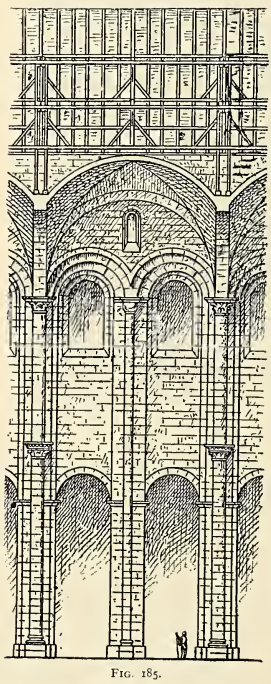


Fig. 185.

The church at Spire is of about the same date as the cathedral at Worms. Its plan recalls the arrangement of the Norman churches of the eleventh century. It is a basilica, composed of three naves of a transept, crowned at the intersection by an octagonal cupola, and of a hemispherical choir, covered by a quarter spherical vault. Inside and out it is adorned with columns ornamented with capitals, which support an arched arcade, crowned by a band course, above which rises an open gallery formed of small columns, relieved by an arcade, an arrangement which resembles the covering of the apse of the church at Auvergne. (Fig. 183.)

The nave of six bays is formed by two rows of arcades rising to the vault and relieving the principal points of support. The bays are subdivided by intermediate pillars united by superimposed arcades, following the arrangement indicated in figure 185 (Fig. 185), which shows at the same time the particulars of the details of the columns supporting the great arch ribs of the nave, which divide it into six parts. The subdivided side aisles are covered by groined arches.

The principal nave is covered by a groined vault without ribs, built on the square plan between ribbed arches The diagonal groins

of the vault form a circle. This arrangement, which is to be met with in a great many German churches, gives to the vault the appearance of a part of a cupola, constructed in imitation of the churches which were modeled after St. Front.

### Chapter XVII.

CHURCH OF ST. AMBROISE AT MILAN—CHURCH OF THE TRINITY AT CAEN.

The general form of the church of St. Ambroise at Milan is that of a Latin basilica; it resembles St. Peter of Vincoli, erected at Rome in the fifth century. With the exception of the interior arrangement there is still greater resemblance between it and those Christian churches built in Syria on the plan of the Roman basilicas, especially that of Qalb-Louzeh and Tourmarin, which dates from the sixth century, and St. Clement, erected in Rome in the ninth century. Like this latter basilica, St. Ambroise is preceded across the width of its façade by a narthex, which forms one of the sides of the four-sided porch, arranged before the church. The plan is that of a parallelogram divided into three galleries, a large one in the middle and two side ones. The principal nave ends in a hemicycle, and the two side aisles in small apsides, all of them covered with quarter spherical vaults.

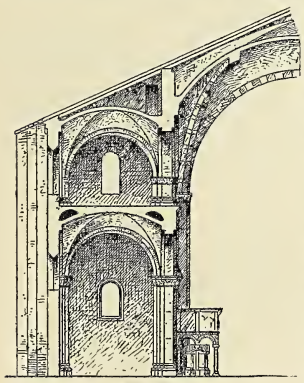


Fig. 187.

The construction of the vaults of St. Ambroise is particularly worthy of attention, because it furnishes us with an example of the construction of this epoch of transition, spoken of in the preceding chapter. (Fig. 187.)

The church of the Trinity, or the ancient Abbaye aux Dames at Caen, which dates from 1046, was, perhaps, originally covered by an open timber roof; but it must have been completed in a different manner from that in which it was commenced, or, what is more probable, the nave must have been remodeled after a fire.

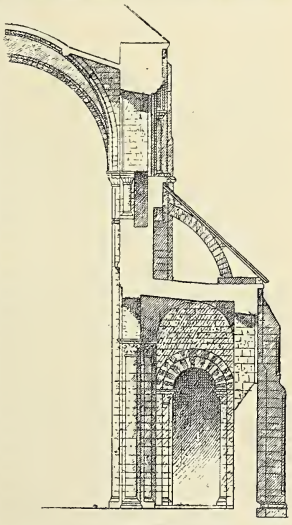


Fig. 190.

The proof is furnished to us by the same arrangement of the high parts and the nave. In the Romanesque churches of Normandy the bays are equal and the piers are of the same thickness, since they had only to sustain an open timber roof, the beams of which rest on one of the columns, which spring from the pier, and reach from the ground to the wooden covering. The churches of Cerisy-la-Forêt and of Mount St. Michel, with which the Abbaye aux Dames at Caen presents many analogies, are, with a great many other churches, authentic examples of the regular and equal arrangement of piers. The vaults of the nave are on the square plan, like the German and Italian churches which have been mentioned, with the addition of an intermediate arch. The side aisles are covered by groined vaults between the ribbed arches, which appear to be the vaults of the eleventh century, before the modification of the upper part of the nave, or its reconstruction at the middle of the twelfth century. In the center of the cross of the transept rises a high lantern tower, which in monastic, and especially Norman churches, were so numerous.

The churches of the Trinity and of St. Etienne possess central towers, which are also a part of the central interior nave, and are not belfries, but cupolas, or, more exactly, lantern towers, giving light to the center of the edifice. The belfries erected on the façade of the Romanesque churches in Normandy are equally important, but they are narrow and terminate in pointed pyramids. (Fig. 190.)

The transverse cut of the nave of the Trinity (Fig. 190) shows the rudiment of the flying buttress, which is still hidden in the thickness of the roof of the side aisles; it effectively counterbuttressed the thrust of the vaults of the side aisles, but is not yet to be seen from the outside.

The vaults of the Trinity still mark a step in advance, a progress realized later by the builders at the time when the period of Romanesque architecture was about to close after having prepared for a new revolution in the art of building by a new system of construction, which began to be felt from the first half of the twelfth century, which increased till the end of the century, and reached complete development at the thirteenth century.

The origin of Romanesque architecture has been sought and found. The birth, the transformation, the superb developments of the grand and beautiful system, so absolutely rational in its principles, as well as in its applications, have been shown. In Gothic architecture, which followed Romanesque, are monuments marvelous in their ingenious combination and almost miraculous in the boldness of their construction, but homage should be given to the mother of all these masterpieces: to Romanesque architecture, which produced monuments which were imitated because they were recognized models as much for their simple beauty as for the wisdom of their construction.

*(Concluded.)*

## The Establishment of Trade Schools.*

BY R. T. AUCHMUTY, OF NEW YORK.

FROM about the year 1835 until quite recent times, there seems to have been very little desire on the part of enterprising young Americans to be mechanics. During that period the West was being made accessible by the construction of railroads. Then came the discovery of gold in California, with the rush for the new El Dorado, and then the drain on the youth of our country by the civil war. Now, all is changed, and the trades have splendid opportunities for ambitious young men. Unless a young man knows how to do some one thing well, there is very little use for him; he certainly cannot command high wages. Twenty-five or thirty years ago a man became a master mechanic very much as he might today start a livery stable or keep a store. That, now, is not possible; a master mechanic must understand his trade, or his business is likely to be in the hands of a receiver. If Horace Greeley was still alive the *Tribune* would no longer say, "Young man, go West." It would say, "Young man, learn a trade and you can take care of yourself in any part of the United States."

During those years I mentioned, from about 1835 to 1865, the old apprentice system dropped out of sight. No one cared about it and no one noted when it disappeared. It had outlived its usefulness, as it practically disappeared in England at the same time, where few of the conditions existed which affected it here.

Nine years ago an effort was made to give our young countrymen the same opportunity to learn the trades as they had to learn law, or medicine, or engineering, or bookkeeping and business methods. There seemed no reason why a trade school should not do for the mechanic what the professional school did for the professional man or the business college for the bookkeeper.

Nine years is a considerable length of time to look back upon, but during those years more has been accomplished than I dared hope for when I started the New York trade schools. The young men, ever on the alert to find some means of bettering their condition, saw that the trade schools would make their labor more valuable, and they surprised their friends with their quickly-acquired skill. Then the master mechanics saw what these trade school youths could do, and began to realize that a new system of trade instruction was being established.

Now the New York trade schools have the active support of the Master Plumbers', Master Painters' and Decorators' and Master Stonecutters' associations and the Merchant Tailors' Society. The master plumbers not only aid in instructing the young plumbers, but they won the right of young men to work in New York, at the cost, as you know, of a long and bitter strike. All honor to them. The master painters take a deep interest in the schools, and no graduate of the stone-cutting class has ever gone unemployed. The merchant tailors first teach and then employ the young tailors. The Mason Builders' Association does not assist the New York trade schools nor protect the young bricklayers, although I have asked them to do both. I do not mention this because I want to criticise—I do not claim the

*Address delivered before a special meeting of the Chicago Builders' and Traders' Exchange, April 17, 1890.

right to sit in judgment—but because I do not want to give the impression that all the associations of master mechanics in the building trades in New York are interested in my schools. My young carpenters and plasterers take care of themselves. I am not aware that the employers in these trades have separate organizations.

During the past two years there has not been a convention of master mechanics in which it is not admitted that trade schools are a necessity and that the workshop is no longer the best place to learn a trade. The National Association of Master Builders, with which you are affiliated, recommend that a lad who wishes to be a mechanic shall go first to a trade school to learn how to work and then shall serve a term for a fixed length of time, or until "old enough and competent" to do a full day's work. Those rules, I need not tell you, were intended to provide both for young lads, who formerly were the only ones who went into the trades, and for young men who have remained at school until well educated and who are old enough to know for what calling in life they are best fitted.

The trade school committees which are appointed by the Master Plumbers', Master Painters' and Decorators' and the Master Stonecutters' associations, do not hold merely an honorary position. It took the trade school committee of the Master Plumbers' Association fourteen hours this spring to read the examination papers and examine the work of the day and evening plumbing classes, and they had to call in last year's committee to help them to get through in that time. The trade school committee of the Master Painters' Association gave each member of the painting classes a careful examination. For two winters one member of that committee spent three evenings each week at the schools, and this winter another member took charge of the fresco class for over a month to put new life into it. Neither of these gentlemen would accept any compensation for their services.

Let us see what trade instruction means. I will take as an example the plumbing trade. At the New York trade schools there are day and evening plumbing classes. Instruction is given to the day class from 8 A.M. to 4 P.M. every day during the three winter months. This class during the past winter had an attendance of sixty young men, coming not only from New York and its vicinity, but from all over the United States. Instruction is given to the evening class on three evenings each week for six months. The members of the evening class are from New York and the neighboring cities. The day class is limited to young men between eighteen and twenty-two years of age, and the evening class to young men between sixteen and twenty-one years of age. The young men in the day class nearly all come to the trade schools without any previous knowledge of the trade. In the evening class, which last winter numbered 146, about seventy per cent of the young men were employed in plumbing shops. The fee for the day class is $35 and for the evening class $12.

All the young men who enter the plumbing classes are required to do the following work, each being advanced as rapidly as his proficiency will allow: 1, lead seams; 2, overcast joints; 3, cup joints; 4, S traps; 5, horizontal wipe joints; 6, horizontal branch joints; 7, upright wipe joints, and joints on pipe placed at various angles; 8, upright branch joints; 9, wiping on a stop-cock; 10, wiping a flange on a 2-inch pipe; 11, wiping on a ferule; 12, caulking; 13, putting an overflow pipe in a safe waste. At the conclusion of this course, miscellaneous and fancy work, sand bends, etc., are done. Some of this work is not now required in plumbing a building, but the exercises are arranged so that the young men will understand lead work. Each young man is furnished with a set of tools, and has his allotted place at the work bench. The instructors are skilled mechanics. Each member of the class is shown how his work should be done, and it is the duty of the instructor to see that it is done neatly and in a workmanlike manner. The solder is melted by means of Bunsen burners, supplied with gas. This avoids the heat and unwholesome gases of charcoal, or the danger which might arise from a great number of gasoline furnaces. Each member of the class is provided with a separate compartment, in which the specimens of his work are kept after being approved of by the instructor. These specimens can be taken away at the end of the course by paying for the cost of the material used.

Great care is bestowed on the scientific instruction. For each of the following subjects printed forms are furnished containing questions with blank spaces left for the answers: 1, Soil and drain pipes; 2, trapping and ventilation of soil and drain pipes; 3, supply pipes; 4, boilers; 5, tanks; 6, fixtures; 7, trapping and ventilation of fixtures; 8, mistakes in plumbing; 9, pumps. The lecturer reads a question and writes the answer to it on the blackboard. This answer is copied by the young men in the blank space in the printed forms. The lecturer then proceeds to explain fully what is meant, to illustrate his meaning by diagrams, and to answer questions put by members of the class. The printed forms, after being filled up, are kept by the young man for future reference. Diagrams are also given the members of the class of improperly arranged plumbing, many of them taken from faulty work that has actually been done in New York and other cities, which they are required to correct. By this course of manual and theoretical instruction, a knowledge of the trade is acquired which it would be difficult to obtain in any other way.

The skill that can be acquired by beginners by means of this course is shown by the photographs I have brought with me of the work done at the schools without assistance from the instructors. In giving the young men their certificates, in March, 1888, the president of the Master Plumbers' Association of New York said that their work was "simply marvelous." The Trade School Committee reported to the Master Plumbers' Association that the work of the day class of 1888-1889 "was as good as could be done by many journeymen," and that the examination was a most trying one. The same system of practical and scientific instruction is followed in the bricklaying, plastering, carpentry, house, sign and fresco painting, stone-cutting and blacksmith classes. I do not propose, as my circular states, to graduate mechanics. The young men learn how to work and the science on which their trade is based at the New York trade schools; then they must serve a term at real work to gain speed of execution and experience. This term is long or short, according to the age or ability of the young man or the trade he may have chosen. My plasterers usually get full wages when they leave the schools, while my young plumbers require from six months to two years shop practice. My bricklayers can lay from six hundred to one thousand brick per day on a straight wall in a workmanlike manner; they can turn corners and build cross walls in 12, 16 and 20 inch walls, construct arches, piers, flues, etc. I have employed my bricklayers, on leaving the New York trade schools, to build fourteen dwelling houses, two apartment houses and three stores, and their work was in every way first-class. I paid them in proportion to the number of brick they could lay in a day.

It is proposed by the Builders' and Traders' Exchange of Chicago to establish a trade school. It will repay you to do so. You will bring a class of young men in the building trades to which you are unaccustomed, and it will gain public sympathy for your association, for there is a wide-spread feeling that the young men of this country are not fairly treated by mechanics.

I gave the advice at the Philadelphia convention that a trade school when first started should be confined to a few trades, as it will save both trouble and expense. The trades, if my experience is of any value, I would advise you to commence with are bricklaying, plumbing and carpentry. Some factory building, or what would be better some small building with a vacant piece of land attached to it, which could be cheaply roofed over for a bricklaying shed, is all that is needed. You know what the rent of such a piece of property would be. If you give a reasonable assurance that the graduates of your school shall have the preference in your employ, the young men's fees will meet the running expenses—that is, the cost of the material wasted and the pay of one teacher to each twenty-five pupils.

Because I advise you not to start too many trades at once, I do not advise your having a small trade school. Chicago is not the place for small things. Chicago people like things on a big scale. I had this winter 520 young men at the New York trade schools. These young men came from nineteen different states of the Union: many of them came to New York to learn a trade, from far west of Chicago. Utah, Colorado, Dakota and Kansas were represented this winter. You might reasonably provide for two hundred bricklayers, as many carpenters and say one hundred plumbers. Then you will have made a good beginning.

Some of you may be wondering if I do not know that you have trade unions in Chicago and that the policy of the unions is to prevent young Americans coming into the trades. Yes, I know all that, and it is just the reason why you should establish a trade school and give the young men of this great city a chance to be mechanics.

Our strength will yield us about $1.75 per day; add skill to strength and the possessor of both can earn from $3 to $5 per day. Now are any organizations, particularly organizations of foreigners, as most trade unions are, to tell us that a young American may develop his strength, but that he shall not develop his skill? God gave each of us certain tastes or inclinations, that the world's work might be done. It is our duty to the young to try to develop those tastes, not to crush them out. Gentlemen, there is a wrong being done our young countrymen. Those who persecute them are committing a crime against humanity, and those who condone a crime share in its guilt.

Do not leave your right to teach your young men to arbitration; there is nothing to arbitrate. Do not seek a compromise with the unions. They will tell you (I have had my experience with them) that if you will confine your trade school to boys of sixteen, you will be allowed to open it. The young men who are wanted in the trades are young men who have graduated from your high schools and your manual training schools, well educated young men, the sons of well-to-do parents. They will elevate labor and make the mechanic arts to be held in higher esteem by the community than they are at present. Take as many poor boys as you can employ, but do not shut out those who are not poor.

Soon, gentlemen, all the world is to be invited here to the great fair. We can see towers and domes and long lines of buildings, of brick and stone, of iron and glass, rising from stately terraces along the lake. Chicago will look on them with pride, the stranger with wonder. Then among the visitors from other lands will come the man with the inquiring mind. He will see Irish, German, French, English and Italian mechanics at work, and will come to this exchange to ask where the American mechanics are. You will be called off suddenly; you will have an important engagement. The man in quest of facts will not be satisfied; he will open the census of 1880 and find that sixty per cent of the skilled workmen of Chicago are foreign born. It is to be hoped that the census of 1890 will not be out, as during the past ten years skilled workmen have been coming from Europe by the tens of thousands, and never before have American boys been so vigorously excluded from the trades. Your visitor will ask the stalwart, intelligent looking youths who are wandering about your streets wondering how they can get a living, if they would not like to be mechanics. The answer will be, "Of course we would, but the trade unions do not permit the master mechanics to teach us or to employ us." The glory of the exhibition will be tarnished. In every land, in many languages, it will be printed that Americans accomplish great works, but, unlike any other civilized or uncivilized race, they do not protect their young.

Let the Builders and Traders' Exchange of Chicago establish a trade school within the exhibition grounds or near its gates. Have

in it one thousand young men at work learning the building trades—a moderate number for a city of over a million inhabitants; and what the Eiffel tower was to the Paris Exhibition, will the trade school of your association be to the World's Fair of 1892.

## Specifications.*

BY J. G. M'CARTHY, OF CHICAGO.

WEBSTER defines specifications to mean "definite, fixed instruction for the strict performance of a particular duty or undertaking." It is evident from this definition that Mr. Webster or his co-laborers never had any experience with specifications in the sense in which they are generally understood in the relations between architects and contractors. There can be no question about the average contractor being the proper individual for Webster to invite to define this term when the task of revising the dictionary is to be undertaken. By so doing, that we will have at least a more liberal construction of the term may, we think, be safely assumed.

Of the many trials and tribulations which beset the pathway of the contractor, and their name is legion, the greater percentage can, it may be assumed, be attributed to this one simple, apparently inoffensive word, specification. In it can be seen, at least through the optical vision of the contractor, all the legal lore in a concrete form which has been inflicted on suffering humanity from the time of John Doe and Richard Roe, of respected memory, down to and including the latest production of deviltry emanating from the office of a government supervising architect in our own times, under a democratic administration. Whether this poor word has been made to suffer the tortures of the damned through the innate absent-mindedness of the contractor, or its sufferings are the result of overfeeding and consequent indigestion, terminating in bad dreams on the part of the architect, your orator saith not. That it has been tortured, twisted and maligned in such a manner that it is scarcely recognizable by its nearest friend (the owner), can readily be proven by going arm in arm in a friendly way with a set of specifications to the nearest building erected under the guiding hand of these said specifications.

The writer has some times thought, perhaps if architects could be induced to consult with practical, honest contractors in the several trades in relation to their specifications, that great good might inure to all concerned, and that many of the incongruities and absurdities to be found in specifications might be avoided.

The great danger of this plan lies in the fact that the architect would be more than liable to find himself in much the same position after the aforesaid consultation which the Irishman did who had a new sign made for his business—reading "Fresh Fish Sold Here," and immediately after putting it in place consulted a number of friends in relation to it, with about the following results:

"Hello, Mike, got a new sign?"

"I have."

"But it isn't right!"

"What's wrong wid it?"

"What do you mane by saying, 'Fresh Fish Sold Here!' Sure everybody knows your store is here and not in Oshkosh."

"Faith, an' you're right," and he rubbed out the word "here."

Along came another friend.

"'Morning, Mike; got a new sign?"

"I have."

"But it isn't right."

"What's wrong wid it?"

"Rub out the 'Fresh!' Everybody knows your fish are not stale."

"Ye have a great head on you; I'll do it," and a daub of the brush eliminated the word.

While Mike was gazing on the result, another friend came along.

"Sure your paintin' is all wrong."

"Arrah! go long wid you. What's wrong?"

"Your sign reads 'Fish Sold.' Everybody knows you sell fish. Nobody expects you to give them away."

Out went the word "Sold."

This was no sooner done than along came another friend.

"What's this I see, 'Fish.' Why Mike, what the divil have you that word there for. Sure everybody knows you sell fish and not tobacco and whisky. Rub it out, it's no good."

This we fear would be the fate of specifications after passing through the hands of the several contractors. Since we cannot ask the architect to do away entirely with his specifications, we must endeavor to adjust ourselves to the existing order of things, and respectfully suggest wherein they may perhaps be improved within the pale of orthodoxy, so to speak.

It is freely admitted on all sides that one of the greatest needs of the profession of architecture at the present time is the lack of facilities for acquiring a sufficient knowledge of the practical work pertaining to building to enable the architect to intelligently guide and direct the several mechanics engaged in the construction and completion thereof. While all are willing to concede to the trained architect a more general and comprehensive knowledge of building in its entirety than can be accredited to any other class, it may safely be assumed that persons engaged in a particular trade pertaining to building and pursuing honestly and intelligently will acquire a knowledge of the especial calling which cannot be expected of the architect who has to give equal attention to a number of departments.

In no other feature of the profession is this lack of practical knowledge more readily discernible than in specifications, and particularly in the specifications of the young architects, a majority of whom must of necessity in their first years of study confine themselves to office work and the technique of the profession. It is not here assumed that young men in architecture are not equally as studious and painstaking in their work as are those in any of the other professions, but unfortunately for the young architect, about one of the first acts of his professional life must be to put his knowledge, or the lack of it, on record in the form of a set of specifications, the net results of which will, to a great extent, make or mar his future success professionally.

The human family is apparently much more interested in the perfect and well paying building of houses than they are in the preservation of life. The young physician who follows in the fixed grooves of his eminent predecessors, may, and oftentimes does, administer Number Seven when Number Eight should be used, and buries his blunder seven feet under the ground, soon to be forgotten, even by those most interested, and not at all, or but slightly, affecting his professional success in after life. The young attorney who misunderstands or misapplies the law can amend his error by the introduction of a new bill or issue in the form of an amendment, and thus succeed in saving both his fee and his professional good name.

The errors of the young architect, however, unlike those of the physician or attorney, cannot be hidden away or forgotten, but stare him constantly in the face, whether they are under or over the ground, and in the majority of cases cannot be amended, except on the plan of the Indian for repairing his gun—supplying it with a new lock, cock, stock and barrel.

The older men in the profession will, it may be assumed, readily concede that only by long years of observation, experience and annoyance, oftentimes hazarding their reputation, have they been able to acquire the practical knowledge which enables them to know and obviate the difficulties which beset their younger brethren on every hand. They have also, we think, placed themselves on record in one or more of their annual gatherings as the foremost advocates for the introduction into the curriculum of the profession of a course in a good and sufficient "mechanical trade school."

The profession in our own city have recently taken an important step in this direction by purchasing the Permanent Exhibit of Building Materials and Appliances, which, we understand, is to be controlled and directed by the local society of architects in the future. It is earnestly to be hoped that instead of passing resolutions to harmonize with the spirit of the moment, to be forgotten immediately on adjournment, architects will go a step or two farther than the purchase, good though it be, and institute during the long winter evenings (or at some other suitable time) a course of lectures and papers by practical men in their own profession, as well as by men of intelligence and character in the building and kindred mechanical trades.

It diminishes no man's knowledge to spread it broadcast, but rather increases its usefulness to his fellow man; neither does it increase his knowledge or benefit humanity to hide it "under a bushel."

If, through associations like your own and those of the older men in your profession, in conjunction with the various organizations in the building and other trades, a spirit of harmony and a better understanding of all the interests concerned can be brought about, then, indeed, will the several associations and clubs have accomplished a good work and justified their coming into existence. This seeming divergence from the text is not introduced with a view to lose sight of our specifications, but rather as a passing thought given to what, to the minds of your readers, is an important element for bringing about the very things we are striving for.

It will not here be attempted to point out any of the errors made by young men, and, indeed, by some of the older ones in the profession, in their specifications, for the reason that the knowledge possessed is special rather than general, but on the assumption that they are co-equal in all the trades connected with building. There is nothing can be done which will so readily remedy them as a series of lectures and papers by practical men in the trades, and the profession of architecture. It may be well here to state that the knowledge of Armstrong, Ruskin and Richardson combined would not enable an architect to successfully cope with dishonest tradesmen; and only by the closest scrutiny into the character of his contractors can the architect hope to bring about the results he has in view in the construction of an edifice. It has become axiomatic that a business or professional generation only lasts on an average about one decade, and the young men who are to-day the students will be called upon tomorrow to take the place of the world's workers who have passed away. It, therefore behooves them to leave nothing undone that will prepare them to grapple with the realities of business and professional life.

The older men, too, owe it to the world about them, as well as to posterity, to impart in its most concrete form to all who seek it the results of their life work, to the end that those who follow them may be able to devote their energies to new fields of action in the world's affairs.

Like most men who aspire to be philosophers and guardians of the public weal, I have denied all that I asserted, and will not assume to having told you anything new, but merely repeated an old, old story in addition to, in the words of Bill Nye, defining "in my own simple way my position in this universe."

In conclusion permit me to ask you, if I have not in this hurried attempt thoughtlessly grated on your intelligence, to command me in any way you think I can be of service to your club, and like (in the words of Wilder) the girl who upon being invited to take some refreshment, said she would take champagne, and was invited to guess again, I will be pleased at any time, and in any capacity within my power, to at least, if I cannot give you mental champagne, guess again in any way that I can serve you.

* Paper read before the Chicago Architectural Sketch Club, May 5, 1890.

## Chicago Builders and Traders' Exchange.

ON April 17 a special meeting of the Chicago Builders and Traders Exchange was held to consider the establishment of a trade school, under the direction of the Exchange. The meeting was called to order by the president, Mr. W. P. Ketcham, who introduced Col. R. T. Auchmuty, of New York, as the principal speaker. There was a full attendance of the Exchange members, and the remarks of the speaker were listened to with attention by those in the front seats, but the constant tramp of "stogy" and creaking boots in the rear of the hall and the incessant hum of voices, in spite of the protests of the president, so drowned the speaker's voice as to make it impossible for the stenographer to take complete notes, necessitating the assistance of Mr. Auchmuty to complete a report of his remarks. This shows that there should be an improvement in the manners of members, who should know better than to disturb so important a meeting, and also the great necessity for a hall connected with the Exchange, especially set apart for meetings, the door of which could be locked after the speaker had been introduced.

Mr. Auchmuty was introduced by President Ketcham. His remarks, which are printed in this number, on page 57, were illustrated by many photographs of work done by pupils in trade schools. At the conclusion of this address President Ketcham said :

President Ketcham : I see Prof. E. W. Blatchford, of the Chicago Manual Training School, is present with us this afternoon, and I know all of you will be glad to have a few remarks from him. Gentlemen, Professor Blatchford.

Professor Blatchford : Gentlemen of the Exchange, I did not expect to speak here today. I came to listen. But first, before I say anything, I wish to express my individual thanks to friend Colonel Auchmuty for the statements he has made today in behalf of the youth of America. Of course I, as all of you, have known of him and his labors in connection with the great trade school of which he is the head—of what he has accomplished through that pioneer enterprise, and therefore expected to be interested and entertained by him ; nevertheless, I feel it a pleasure and a duty to make this acknowledgment on my part for what he has said today. I presume your president called upon me because of my connection with the Manual Training School, located on the corner of Twelfth street and Michigan avenue, which originated with and was organized by the Commercial Club of this city in 1884. The business men of this city felt there was need of a different, a broader education for the boys and girls of our city, especially boys, than was provided for at our public schools ; a place where they could be taught to use the capacities God had given them to their own advantage and the advantage of the people. These views were often discussed, and finally the matter was brought formally before our club, and the whole ground was carefully gone over, when it was decided to start the school at once. One hundred thousand dollars cash was subscribed. The lot was bought and the building put up. The result is that it has been a success from the start. We take boys from fourteen years of age up to eighteen years of age. They are taught six hours a day ; three hours to the study of mathematics and drawing, and three hours in the manual school. We teach drawing because drawing is the language of mechanics. The first year we teach them carpenter work. The second year, molding. The third year, work in the machine shop. In the carpenter shop, the boy is taught the use of the plane—we have over twenty different kinds of planes. He is taught how they are made and everything pertaining to them, including their various uses. So with the saw, the chisel and the other tools. He is taught the character and uses of the different woods. Where pine is obtained ; oak, walnut, etc. Why we want to use pine, or oak, or walnut. He must submit to frequent examinations by his teachers, and by an examining committee of experts at the end of the third year, when he must show some work done by himself, when, if he passes successfully, he is given a diploma. Now these trade schools of which Colonel Auchmuty has been telling us about are something we need here in Chicago. Some may say because we have a manual training school we do not need a trade school ; but because we have the manual training school makes the need of a trade school more of a necessity. The manual training school stands in the relation to a trade school that the public schools do to the high schools. We prepare the boys so that when they go into a a trade school they will feel the good of our training there, and we feel the need of such a supplemental school in this city. There is another thing I want to thank Colonel Auchmuty for, and that is what he said about the coming World's Fair. When I first came to this country there was no town nearer than Galena, and we traveled to it by the old-fashioned stage coach. Now, there are many towns with railroads reaching to them and beyond this large city with its great, massive business houses piling ten and twelve stories high. We have made the geography of this country. Nature did but little for us. While we have done much and have much, there are some things we still need, and if there is any one thing we do need more than another it is a place where we can teach our boys so that when they become men they will be able and competent to carry on this work. We shall be honored by getting up this World's Fair ; honored by other states and countries contributing to it, but, if we can show them we are engaged in building up the greatest thing God ever made — manhood, we shall be accorded greater honor than for the building up this marvelous city. Gentlemen, the time was when the workingman was considered beneath those who followed other occupations, and there are some who still hold to those opinions of other days, but I tell you, gentlemen, among the thinking men of this land it is recognized there are no nobler men than those who have created the wealth of the world — the workingmen — and the history of the world proves the assertion. What each one of us should do, you working in your place, I in mine — all working together — is to help build up this temple of manhood. I am glad to say there are a number of institutions where young women are taught, and thoroughly taught, in avocations whereby they can get better wages. What we want more is a school for boys of the same character and capacity as those in New York and Philadelphia. Now I want to express my thanks for being invited here today. Just before I came I got word from two members of our club who intended to be here, but were called away by sickness, who would have been glad by their own words to have expressed their appreciation of the victory that has come to Colonel Auchmuty through his indomitable energy and wisdom. And now I want to invite you each to come down to our school so that we can show you just what we are doing. We have now seventy-five boys, and are about to increase our capacity to receive twenty-five more. I want to take in one hundred. Come down and spend an hour. You will receive a warm welcome.

President Ketcham : I am sure the Exchange is much obliged to Mr. Blatchford for the kind words expressed, and also to Colonel Auchmuty, whom we have called here and listened to today.

On motion, a vote of thanks was returned to Colonel Auchmuty and Professor Blatchford for their addresses before the Exchange.

President Ketcham : In this matter of a training school, as you know, we have appointed a special committee for the purpose of formulating a plan. I see Mr. J. G. McCarthy, the chairman of that committee, is present, and I would like to inquire what steps have been taken and how far the committee has got ?

Mr. McCarthy responded to the call of the chair and spoke at some length in regard to the importance of such a school in Chicago, premising his remarks by saying he was as ready as any man to move or second a motion for a vote of thanks, but begged to remind the Exchange that passing a resolution wouldn't pay the national debt nor in any degree aid in bringing about a trade school in this city. To do that the members would have to get down to business, which meant money. To stimulate the members the committee had brought Colonel Auchmuty to Chicago to tell them of his success in New York and to show them the same success could be met with here. He concluded by stating the committee had completed a report which recommended a school upon the plan of Colonel Auchmuty's school in New York, copying the plan of that school in all its essential features. That the committee was ready to make that report at the earliest call of the Exchange.

At the suggestion of President Ketcham Saturday, April 26, at 1 P.M., was set for hearing the report of the committee. The Exchange then adjourned to that date and hour.

The association was called to order by President Ketcham, at 1 o'clock, April 26, and after reports upon the work of the classes in the New York trade school, received from Colonel Auchmuty, had been distributed, Mr. J. G. McCarthy, chairman of the Exchange Committee on Trade School, read the following report :

*To the Builders' and Traders' Exchange:*

GENTLEMEN,—Your committee to whom was assigned the work of investigating into the feasibility of establishing a trade school under the control and direction of the Exchange, respectfully submit the following report :

We have, to some extent, examined into the workings of several schools for "Manual Training and Technical Instruction," and have not been able to find any in the country that contains even approximately the specific form of instruction which the committee assumed it was desired to establish in an exclusively trade school, excepting, perhaps, the school of Colonel Auchmuty, of New York City.

Assuming, as the committee has, that it was the intention of the Exchange to institute a school for direct instruction in the several trades constituting the membership thereof, we herewith submit a plan for your consideration :

1. That a committee of one be appointed by and from each specific trade in the Exchange. Said committee, together with a committee of three from the Exchange at large, to be appointed by the president of the Exchange upon the recommendation of the board of directors of the Exchange, shall constitute the board of directory for the trade school.

The president of this Exchange shall be ex-officio chairman of the trade school board of directory, and shall exercise the same power in connection therewith which he does as presiding officer of the Exchange.

3. None but members of this Exchange shall be eligible to appointment on the board of directors for trade schools.

4. The several committees shall have charge of the specific work of their particular trade in the school, and shall from time to time submit to the general board for consideration such plans and methods as may, in their judgment, seem best for the fullest instruction in their particular trade. They will not have the power to introduce or adopt into the school any plan or method of instruction that has not first been submitted to the general board and approved by them.

5. The membership of the board of directory for the trade school shall at all times be under the control of the Exchange, and appointments thereon approved by the directors of the Exchange.

6. Removals from or addition to the several committees may be made at any time by the directors of the Exchange, after due notice of such removal or appointment has been given the specific trades by the Exchange.

7. The board of directory for the trade schools, after being duly constituted as herein set forth, shall, in the absence of any specific action to the contrary, have full power to act for, and represent, the Exchange in all matters pertaining to the trade school.

8. The board of directory for the trade school shall, as soon as may be found practical, purchase or lease, in the name of and for the Exchange, such buildings as in their judgment will be suitable for the school, and equip the same with such tools and appliances as may be found necessary on the recommendation of the several committees from the different trades. Said building, tools and appliances to be the exclusive property of this Exchange, and be at all times subject to the direction and control of the Exchange.

9. The board of directory for the trade schools shall have power to appoint one general secretary, or superintendent for the school, and also one skilled and intelligent mechanic as teacher in each trade department, said appointments (except the secretary) to be made on the recommendation of the several trades, and be subject to removal by the board of directory at any time.

They shall also have power to appoint such other help as may seem necessary in their judgment to keep the school in good and proper condition, but the corps of professional assistants must not exceed the limit here laid down, except through the specific authority of the Exchange.

10. The salary of the superintendent shall not exceed the sum of $1,200 per year, and the teachers shall only be paid such sums as first-class mechanics in their respective lines could earn working at their trade.

11. That details of instruction and appliances be promulgated by the several trade committees, and be by them submitted to the board of directory for action before they can be adopted.

Your committee have approximately estimated the expense of conducting such a school as is here proposed for the term of one year, and herewith submit

their figures on the basis of beginning with six (6) trade departments (stone cutting, brick and stone masonry, carpentry, plumbing, painting and glazing, plastering):

For rent of building, salary of superintendent, salary of six (mecbanic) teachers, tools and appliances, salary of janitor, stationery expenses, printing, etc., a total of about $10,000.

We would respectfully urge upon the Exchange the necessity of immediate action on the basis of this report, or some other plan which may suggest itself, to the end that work may be commenced in a practical manner.

J. G. McCARTHY, *Chairman.*
D. V. PURINGTON,
GEORGE TAPPER,
WILLIAM GOLDIE,
F. V. GINDELE,
*Special Committee on Trade Schools.*

Mr. Purington called attention to the fact that the committee mentioned would cover every trade represented in the Exchange and would be unwieldy and more than required at present.

Mr. McCarthy said that if adopted the report would stand for the future law in the matter; that at first the six trades mentioned would only be established.

On motion, the report was received.

Mr. Gindele stated that the first matter to be considered was whether the association wished a trade school.

Mr. Molding said that the question of expense should not be considered, and moved the adoption of the report.

Mr. Purington said that at least half of the necessary money could be raised by voluntary subscription in this meeting.

Mr. McCarthy said that he hoped that no hasty action would be taken and a lot of resolutions passed and then dropped; that the report of the committee should be carefully considered, and then when finally decided it would receive the full support of every member.

It was suggested by Mr. Freeman that the report be printed and sent to every member.

A resolution proposed by Mr. Kimbell, amended by Mr. Alsip and Mr. Gindele, was then passed, to the effect that it was the sense of the meeting that a trade school be established under the auspices of the Exchange; that the secretary be instructed to print and mail copies of the report to members; that the Exchange be asked to vote from the funds in the treasury the sum of $5,000 for the support of the school, and that subscription blanks be inclosed with the report to enable members to make voluntary subscriptions.

Mr. Purington moved that the secretary be authorized to take subscriptions at this meeting to show the attitude of the members present toward the trade school.

A question being raised regarding the constitutional law governing the voting of money from the treasury, it was explained that this was done by the board of directors and could be ordered by the members. Mr. McCarthy started the subscription ball rolling by subscribing $500. The chair appointed as tellers to collect subscriptions Messrs. Purington and McCarthy. The secretary announced at the conclusion that the subscriptions amounted to exactly $2,000.

This was ordered to be added to the report; the matter was placed in the hands of the trade school committee, and the meeting adjourned to 2 o'clock three weeks from date—May 17.

## A Canadian Architects' Registration Bill.

ABOUT a year ago the architects of the Province of Ontario, Canada, formed an association. One of the first measures adopted for the elevation of the profession was a bill for the registration of architects, to be submitted to the Ontario legislature for passage. This bill was approved by the association at its annual convention on November 20, 1889, and placed in charge of a committee for presentation to the legislature. Upon comparison, the act as passed, which is given below, differs in many respects from the original draft passed upon by the association, withholding several of the privileges asked for. Being passed, as a government measure without committee, the association representatives had no opportunity for securing a hearing upon it item by item as with a private bill. The act is given in full, that it may be compared with the bills now in the hands of the state associations for passage by state legislatures.

THE ONTARIO ARCHITECTS' ACT.

Whereas it is deemed expedient for the better protection of the public interests in the erection of public and private buildings in the Province of Ontario, and in order to enable persons requiring professional aid in architecture to distinguish between qualified and unqualified architects, and to insure a standard of efficiency in the persons practicing the profession of architecture in the province, and for the furtherance and advancement of the art of architecture;

Therefore her majesty, by and with the advice and consent of the legislative assembly of the Province of Ontario, enacts as follows:

1. This act may be cited as "The Ontario Architects' Act."

2. All persons who shall cause their names to be registered under the provisions of this act, shall be, and are hereby incorporated under the name and style of "The Ontario Association of Architects," hereinafter referred to as "The Association."

3. The Ontario Association of Architects shall be a body corporate by the name aforesaid, having a perpetual succession and a common seal, with power to acquire, hold and dispose of personal and real estate, for the purpose of this act, and to sue and be sued, in the manner usual with such corporations.

4. Every person registered under the provisions of this act, shall be a member of the said association.

5. There shall be a council of management of the said association, to be appointed in the manner provided for in this act, and hereinafter referred to as "The Council."

6. (1) The council shall be composed of nine persons, who shall in the first instance be appointed by the lieutenant-governor in council within one month after the passing of this act, and shall be British subjects, both residing and practicing the profession of architecture within the said province for at least ten years before the passing of this act. The members of said council so appointed shall meet in the city of Toronto, in the county of York, for the purpose of organization, within one month after appointment, at such time and place as may be directed by proclamation in the Ontario *Gazette*.

(2) Any five members of the council shall form a quorum.

7. The members of the council so appointed by the lieutenant-governor in council, shall hold office for the following terms respectively: the first three names mentioned, for the term of three years; the second three names mentioned, for the term of two years; the third and last three names mentioned, for the term of one year.

8. All subsequent members of the council shall be elected by ballot, in such manner as may be provided for by the by-laws of the association, at the annual meeting of said association, or at a special meeting called for that purpose; and the member, or members, obtaining the greatest number of votes shall be declared elected.

9. No person shall be eligible for election to the council, or qualified to fill any vacancy thereon, or to vote for any member thereof, unless duly qualified under the provisions of this act and the by-laws of the association.

10. All elected members of the council shall hold office for the term of three years, except as hereinafter provided, and five shall form a quorum.

11. (1) In case of the resignation or death of any member or members of the council, not exceeding four, the other members of the council shall have power to fill all vacancies so caused, until the time of the holding of the next annual meeting, provided said annual meeting is not to be held within a period of three months of the occurring of such vacancy or vacancies.

(2) In case of the resignation or death of five or more members of the council, the president or vice-president of the association, or in case of their, or either of their default for a period of ten days, any five members in good standing shall have power to call a special meeting of the association upon a notice of not less than ten days, for the purpose of filling the vacancies so caused.

(3) In case of an election to fill the vacancies referred to in sub-sections 1 and 2, the member receiving the greater number of votes shall be considered the member elected to fill the vacancy which will require the longer time to expire, and so on until the vacancies are filled.

12. In case of any doubt or dispute as to who has or have been elected a member or members of the council, or as to the legality of the election of any member or members of the council, it shall be lawful for the other duly elected members to be, and they are hereby constituted a committee to hold an inquiry and decide who, if any, is, or are, the legally elected member or members of the council, and the person, or persons, if any, whom they decide to have elected shall be and be deemed to be the member, or members legally elected, and if the election is found to have been illegal, the said committee shall have power to order a new election.

13. Meetings of the association and the council shall be at such times and places as may be fixed by the by-laws of the association or council respectively; and in the absence of any rule or regulation as to the summoning of meetings of the association, or of the council, it shall be lawful for the president, or in the event of his absence or death, for the registrar to summon the same at such time and place as to such officer seems fit, by circular letter to be mailed to each member.

14. In the event of the absence of the president from any meeting, either of the vice-presidents, or in their absence some other member to be chosen from among the members present, shall act as president.

15. All questions submitted to the association, or the council, shall be decided by a majority of the members present, not being less than five in number in case of the council, and twenty in case of the association.

16. At all meetings the president for the time being shall have only a casting vote.

17. There shall be paid to the members of the council such fees for attendance, and such reasonable traveling expenses as may be fixed by by-law passed by the association at the annual meeting.

18. The council shall annually elect from among its members a president and two vice-presidents, and shall appoint a registrar, treasurer, solicitor and such other officers as may be necessary for the working of this act, who shall hold office during the pleasure of the council, and who shall, as well as being officers of the council, hold the like position as officers of the association.

19. The council shall have power to fix by by-law the salaries or fees to be paid to such officers, and to the board of examiners hereinafter appointed.

20. The council shall have power and authority:

(1) To appoint an examiner, or examiners, for the purpose of ascertaining and reporting upon the qualification, (*a*) Of all persons who shall present themselves for admission and enrollment as students at any of the matriculation, preliminary, intermediate or final examinations.

(2) To make all necessary rules, regulations and by-laws respecting the admission and registration of students, the periods and conditions of study, and the enrollments of architects as members of the association and all matters relating to the discipline and honor of the profession.

(3) To regulate and fix the annual admission fees payable by architects and students, and to make all rules, regulations and by-laws necessary for the proper working or carrying out of the provisions of this act.

(4) To enact by-laws as to the terms upon which it will receive the matriculation or other certificates of colleges and other institutions not in the Province of Ontario.

21. Any student who has matriculated in arts in any university in her majesty's dominions, or in the Ontario School of Practical Science, shall not be required to pass the preliminary examination.

22. (1) Any person practicing the profession of architecture within this province, on the coming into force of this act, may become a member of the association, by causing his name to be registered with the registrar of the association within three months from the appointment of such registrar, and by paying to the registrar such fees as may by by-law or otherwise be made payable in that behalf.

(2) In case any such person as aforesaid omits to be registered within said period of three months, through absence, illness or inadvertence, such person may, at the discretion of the council, be admitted to enrollment as an architect.

23. Any other person who applies for admission to registration as an architect after the coming into force of this act, shall not be less than twenty-one years of age, and shall have served as a student not less than five years with a principal or principals entitled to register under this act, or with any other principal or principals approved by the council, and have passed such qualifying examinations as may be required by this act.

24. (1) All students desirous of entering the profession of architecture shall be presented by a member of the council, and shall cause their full names to be entered with the registrar, and shall pay such fees, and submit to such examinations as shall be necessary in that behalf; provided that any person who, before the passing of this act, was entered as a student for a shorter term than five years, but not less than three, with a principal or principals qualified to be registered under this act, or with any other principal or principals approved by the council, shall, on serving the full term of his indenture and passing the examinations prescribed by the council, be entitled to register under this act.

(2) Notice and evidence of existing studentship shall be given to the registrar within six months after the passing of this act, and shall be accompanied with such fee as the council shall from time to time direct, and with properly executed articles of indenture for the said term.

(3) Any person who has graduated from the Ontario School of Practical Science shall be required to serve only three years as a student, one of which three years may be served during the vacations of such school.

(4) Upon and after the passing of this act, students shall serve such term as is required to be served by the provisions of this act, under indenture, to a registered architect, which indenture and any assignment thereof with affidavit of execution thereto attached, shall be filed with the registrar upon payment of such fee as the council may by regulation direct.

25. From and after the first day of July, 1890, no person shall be entitled to take or use the name or title of "Registered Architect," either alone or in combination with any other word or words, or any name, title, or description, implying that he is registered under this act, unless he be so registered. Any person, who, after the above date, not being registered under this act, takes or uses any such name, title, or description, as aforesaid, shall be liable, on summary conviction, to a fine not exceeding $25 for the first offense, and not exceeding $100 for each subsequent offense.

26. The registrar of the council shall, in every year, cause to be printed, published, and kept for inspection at his office, free of charge, under the direction of the council, a correct register of the names, in alphabetical order according to the surnames, with the respective residences, in the form set forth in schedule A to this act, or to the like effect, of all persons appearing on the general register on the first day of January in every year, and such register shall be called "The Architects' Register," and a copy of such register for the time being purporting to be so printed and published as aforesaid, shall be evidence in all courts, and

before all justices of the peace and others, that the persons therein specified are registered according to the provisions of this act; provided always, that in case of any person whose name does not appear in such copy, a certified copy under the hand of the registrar of the council, of the entry of the name of such person in the register, shall be evidence that such person is registered under the provisions of this act.

27. If the registrar shall willfully make, or cause to be made, any falsification in any matters relating to the register, he shall be deemed to be guilty of a misdemeanor, and shall, on conviction thereof, be imprisoned for a term not exceeding twelve months.

28. Any person who willfully procures, or attempts to procure registration under this act by making, or producing, or causing to be produced, or made any false or fraudulent representation, or declaration, either verbally or in writing, that he is entitled to such registration, shall be deemed guilty of a misdemeanor, and shall, on conviction thereof, be sentenced to imprisonment for any term not exceeding twelve months.

29. There shall be paid to every registered architect summoned to attend any court, civil or criminal, for the purpose of giving evidence in his professional capacity, or in consequence of professional services rendered by him as an architect, for each day he so attends, in addition to his traveling expenses (if any), and to be taxed and paid in the manner by law provided with regard to the payment of witnesses attending such court, the same fee or allowance as is payable to provincial land surveyors.

30. (1) All fees payable under this act may be recovered as ordinary debts due to the association, and all penalties under this act may be recovered and enforced before one or more justices of the peace in manner directed by the Revised Statutes of Canada, chapter 178, entitled the "Summary Convictions Act," and any act amending the same.

(2) Any sum or sums of money arising from conviction and recovery of penalties as aforesaid, shall be paid immediately upon the recovery thereof by the convicting magistrate to the registrar of the council.

(3) Any person may be prosecutor or complainant under this act, and the council may allot such portion of the penalties as may be expedient toward the payment of such prosecutor.

31. Subject to the other provisions of this act, all notices and documents required by or for the purposes of this act to be sent, may be sent by post, and shall be deemed to have been received at the time when the letter containing the same would be delivered in the ordinary course of the mail, and in proving such sending it shall be sufficient to prove that the letter containing the notice or document was prepaid and properly addressed and put in the post. Such notices and documents may be in writing, or in print, or partly in writing and partly in print, and when sent to the council or other authorities shall be deemed to be properly addressed if addressed to the said bodies or authorities, or to some officer of the council or authority at the principal place of business of the council or authority, and when sent to a person registered under this act, shall be deemed to be properly addressed if addressed to him according to his address registered in the register of the association.

32. All moneys arising from fees payable on registration or the annual renewal fees, or from the sale of copies of the register, or otherwise, shall be paid to the registrar of the council, and by him paid over to the treasurer, to be applied in accordance with such regulations as may be made by the council for defraying the expenses of registration and the other expenses of the execution of this act, and subject thereto toward the support of museums, libraries or lectureships, or for other public purposes connected with the profession of architecture, or toward the promotion of learning and education in connection with architecture.

(2) The council shall have power to invest any sum not expended as above in such securities as shall be approved by the government of the Dominion of Canada, or of the Province of Ontario, in the name of any three of their number appointed as trustees, and any income derived from such invested sums shall be added to and considered as part of the ordinary income of the association.

(3) The association may also use surplus funds or invested capital for the rental or purchase of land or premises, or for the building of premises to serve as offices, examination halls, libraries, museums, or for any other public purpose connected with architecture.

33. The registrar and treasurer of the council shall enter in books to be kept for that purpose, a true account of all sums of money by them, or either of them, received and paid under this act, and such account shall be audited and submitted to the council at such time, or times, as the council may require.

34. It shall be the duty of the registrar to keep the register in accordance with the provisions of this act, and the by-laws, orders and regulations of the council.

SCHEDULE A.—SECTION 26.

A. D. 1890.

| Date of Registration. | Name. | Title or Distinction (if any). | Residence. |
|---|---|---|---|
| 1890. July 1st. | A. B. | Toronto University | Toronto. |
| 1891. Aug. 1st. | C. D. | | London. |
| | E. F. | | Ottawa. |
| | G. H. | | Toronto. |
| | I. J. | | Hamilton. |

## Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.

A meeting of the Executive Committee will be held at New York on Friday, May 16, for the purpose of receiving the ballots upon the admission of several new members and other business.

CHICAGO ARCHITECTURAL SKETCH CLUB.

On April 21 the club met to listen to a paper on architectural design in fireproof construction by Architect John W. Root. That gentleman explained that not having time to prepare the contemplated paper, he had arranged a substitute which would probably give much more pleasure. This was the reading of a poem upon "A Romanesque Doorway," written by Architect Henry Van Brunt, of Kansas City. Mr. Root also sent to the club rooms a large number of valuable illustrated works and portfolios of etchings and photographs illustrative of the epoch and style of which the poem treats. These were spread upon tables, and after the reading of the poem the members occupied an hour or more in their inspection. The poem is a remarkable production, and, while written with no thought of giving it any publicity except with a few friends, it was the general verdict that the inspiration received from it and the clear insight it gave to the ecclesiastical art period from the tenth century to the middle ages would place it among the most valuable of the architectural writings of American authors. A hearty vote of thanks was tendered Mr. Root, in which the author of the poem was included, for the evening's pleasure, Mr. Root being asked to convey the same to Mr. Van Brunt.

At the meeting, April 28, Mr. Morse, secretary of the Chicago Lantern Slide Club, exhibited about two hundred exchange slides from the New York Club. Beside the club members a large number of ladies was present. These lantern exhibitions have become quite a feature with the club, and the kindness of the Lantern Slide Club is amply appreciated by the members and friends who spend many delightful evenings before the lantern.

Mr. J. G. McCarthy, on May 5, read a paper upon "Specifications" to a well attended meeting of the club (printed on page 59). In the discussion which followed in answer to questions, it developed that the best finish for woods was oil or varnish and "main strength and elbow grease;" that varnish and shellac have no affinity and one should not be applied over the other. In eighty-five samples of ground colors analyzed, from twenty-five to fifty per cent of pyrites was found. In specifying glass in small sizes specify single thickness, as no double glass was made in small lights. American plate glass was as good as French; it was hard to tell the difference, and one was apt to get the former anyway. English crown plate was clearer than other plate; though not used much of late years it was admirable for residence use. Old varnish, such as English copal, and "elbow grease" was the best finish ever made, and varnish at $1.40 a gallon was as good as at $4. The finishes now placed on the market by leading houses were reliable if properly applied. On floors not less than three coats of varnish or shellac should be applied. "Don't say 'rubbed down,' say 'rubbed to a cabinet finish' when writing specifications."

After a unanimous vote of thanks had been tendered that gentleman the meeting adjourned

The competition drawings for "an artist's house by the sea, with interior sketch of studio rendered in sepia" were received and will prove the best competition of the year both in number of competitors and in the execution of the drawings.

It should be noted that in the publication of the paper upon water-color study as applied to architecture, published in the April number, the author's name, Mr. W. G. Williamson, was omitted. Of course it was a typographical error, as due credit should have been given its author for so excellent a paper on water-color study.

KANSAS ASSOCIATION OF ARCHITECTS.

The Kansas Association of Architects met at the Copeland Hotel, Topeka, pursuant to a call, on April 7. The meeting was called to order at 5 P.M. by the president, W. R. Parsons. H. M. Hadley was elected secretary *pro tem.*

The minutes of the last two meetings were read by the secretary. No objections being offered they stand approved.

The following resolution was offered by J. G. Haskell, and adopted:

*Resolved*, That the by-laws be and are hereby amended so as to read, "One-third of the members in good standing and resident of the State of Kansas at the time of the meeting, shall constitute a quorum."

There were twenty members present.

There are twenty-six members in good standing in the association.

On motion, the association proceeded to elect officers for the ensuing year, and the following officers were elected: President, J. G. Haskell; vice-president, J. C. Holland; secretary, H. M. Hadley; treasurer, Seymour Davis.

The following resolution was offered by J. G. Haskell, and adopted:

*Resolved*, That the executive committee are hereby instructed to make such revisions of the constitution and by-laws of this association as will bring it into harmony with those of the American Institute of Architects, and report their action to this body at next meeting for final action.

At the conclusion of business the association adjourned to meet June 17, 1890, at the Copeland Hotel, Topeka.

## Our Illustrations.

The Denver Athletic Club; Varian & Sterner, architects.

Timmerman hotel and theater Chicago Illinois; Jul De Horvath, architect.

Residence of Dr. L. R. Williams, Chicago; Maher & Corwin, architects.

Residence for T. D. McNeeley, St. Joseph, Mo.; Eckel & Mann, architects.

Residence of Mr. J. W. McAlister, St. Joseph, Mo.; Eckel & Mann, architects.

Design for Baptist church, Aberdeen, Miss.; Varian & Sterner, architects, Denver, Col.

Sketch, residence of Mrs. John C. Coonley, Lake Shore Drive, Chicago; Irving K. Pond and Allen B. Pond, architects.

Toronto Architectural Sketch Club, competition for a country railway station; first place, Ernest Wilby; second place, A. H. Gregg.

PHOTOGRAVURE PLATES.

(*Issued only to subscribers for the Photogravure edition.*)

Residence of Mr. August Fiedler, Chicago; August Fiedler, architect.

Residence of Mr. Edward H. Valentine, Chicago; Burnham & Root, architects.

Residence of Mr. George S. Willits, Chicago; William R. Emerson, architect, Boston.

Interior view, Calvary Presbyterian Church, Cleveland, Ohio; C. F. Schweinfurth, architect.

View in hall, summer residence of Hon. M. A. Hanna, Cleveland, Ohio; C. F. Schweinfurth, architect.

Residence of Mr. Albert H. Olmsted, Hartford, Conn.; McKim, Mead & White, architects, New York.

View in dining room, summer residence of Hon. M. A. Hanna, Cleveland, Ohio; C. F. Schweinfurth, architect.

## Building Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, May 10, 1890.

Clearing house returns, railway traffic statistics, iron, coal and lumber market reports, and general trade and manufacturing indications all justify the conclusion that business is expanding and upon a solid basis. This expansion is certainly a healthful one, and that is worth knowing. The builders in all sections of the country are overcrowded with work. More or less business has been held back on account of the labor agitations, but now that emergency is past, manufacturers have nothing to fear, and are pushing forward with activity and confidence. The manufacturing interests in all branches are not only well supplied with work, but are crowded. A great many machinery-making concerns have been obliged, within the past month or so, to refuse additional orders. The manufacturers of building material have been able to execute all the orders they have thus far taken, with promptness. The iron trade is quite active. During the first four months of the year prices receded gradually, but during the past few days symptoms of a reaction have appeared, and this has had the effect of inducing tardy buyers to come forward. The lumber trade is active, and prices on the whole are somewhat more satisfactory than last year. Industrial activity is as marked a feature throughout the South and Southwest, this year, as last, if not more so.

## Synopsis of Building News.

**Baltimore, Md.**—Architect Henry Brauns has prepared plans for a brick and granite power house for the Baltimore Traction Company; size 210 by 260; estimated cost $25,000.

**Chicago.**—The workmen in the building trades, after three years spent in endeavor to figure the net losses sustained by them in the strike of 1887, have signified that they have about regained what they then lost in the prospect of steady work for the season, and, as is the manner of these strangely organized beings, decided to strike again. This time the strike has not extended beyond the carpenters. The remains of the union, under much the same leadership as that which controlled their action three years ago, some time in January sent a demand to the Carpenters' and Builders' Association, which, in general terms, intimated that if they had any sense, they would make a contract with the union similar to that between the bricklayers and their employers. The date given was April 1, and, receiving no reply from the association, they declared a strike. At this time small in number, the union, in the absence of proper police protection to those who thought more of the welfare of their families than the specious arguments of doubtful agitators, succeeded in "persuading" the unprotected workmen to stop work. A spirit of fear rather than fraternal feeling brought large additions to the union's membership. In all respects the strike was the duplicate of that of three years ago, except that the union clamored for arbitration. This seemingly reasonable proposition was not entertained by the Carpenters' and Builders' Association, which numbers about two-thirds of the employing carpenters of the city, on the ground that they did not wish to transact business with the union, and, therefore, while arbitration was just between contending parties, they had nothing to arbitrate.

The Carpenters' and Builders' Association still holds this position, each member hiring such men as he can, and the work of the city progressing slowly but with so little interruption, except through the terrorism excited by members of the union in unprotected districts, that neither architects nor owners seem to be inconvenienced more than the ordinary break-down of a brick wagon or the delay of a material contractor would ordinarily entail. Meanwhile the contractors whom the association has refused membership and others formed a rival association, called the "Boss Carpenters," as their constitution intimates, for the betterment of their trade "and for the settlement of differences between its members and the journeymen carpenters," with the direct purpose of making any sort of bargain possible with the union and the hope of in this way obtaining workmen and getting into the shoes of the older contractors. How effective this will be the future will tell, though it is not probable that work will be taken out of the hands of old and tried contractors and given to men before unknown, for prices which of necessity must be largely in excess of the original contract. The union, composed of every man that makes application, without regard to his skill, demanded 40 cents an hour and to work eight hours, and a great deal of sympathy has been wasted on them both by the public and in the newspapers by those who believe in an eight-hour day. The fact is that neither wages nor hours have figured in the present strike. The master carpenters have been paying 40 cents and over to competent men and for three years most of them have been working eight hours, the association formally declaring some two months ago that because the masons were working eight hours it was not expedient for carpenters to work longer time.

The reasons for not wishing to do business with the Carpenters' Union, which the latter calls "recognition," are many; but probably the greatest lies in the example constantly presented by the Master Masons' Association, and the effect of arbitration as demonstrated in their case. They arbitrated their differences with the Bricklayers' Union three years ago, and there is a binding contract between them and a permanent arbitration committee to settle differences. The result is that the union practically owns every mason contractor, every trowel, every brick and mortar board and every bricklayer in Chicago the moment any of these agents are employed in the erection of a building. Their rule is absolute, and it costs $40 for a bricklayer to take up a trowel, that sum having to be paid into or guaranteed to the union before he can commence work, this rule holding good whether he belongs to a union elsewhere or not. The steward on a job is the ruler of the contractor. Let the latter be ten minutes late in coming to the workmen with their money and he can be and often is fined $50, which must be paid before that contractor can continue business. These, the union holds, are not among the questions for the arbitration committee to settle. In fact, it is hard to find out exactly in what those questions consist; and this is the "arbitration" proposed to the master carpenters, and which they have refused to even contemplate. The new Boss Carpenters' Association, after asking the Carpenters' and Builders' Association to join them, have, according to programme, "arbitrated" with the union, settled on the union's terms, the union giving them permission to do business, provided they employ only union members, pay them such wages for such hours as they designate and do not take sub-contracts from the members of the old association. The union will now proclaim a great victory and the press of the country will record it.

For this reason the facts are given in detail, and they may be summed up in the statement that the reputable carpenter contractors of the city are continuing business, attending to their work, hiring such men as present themselves, the only question asked being in regard to capability to perform, and being more successful each day in securing men willing to work, and in protecting them from the persuasive influences of gangs of strikers. The union's fight was for "recognition" by the Carpenters' and Builders' Association. They as a union have been entirely ignored by its members, and upon making a bargain with a new association which they, the union, is strongly suspected with having assisted in organizing, certainly with many members in the new organization, they now declare the strike off and proclaim a victory.

In the architect's offices there has never been so much new work "talked of," so many sketches made with no results; and while this may be satisfactory from a financial standpoint, an architect always prefers to see the building erected. Whether this uncertain state of things has anything to do with the unsettled state of labor, is a question, but it is much more probable that it mainly results from speculation in regard to the demand produced by the prospective World's Fair.

Architect O. W. Marble: For S. Stern, a three-story store and flat building on State street near Twenty-fifth, pressed brick, galvanized iron and stone. For George Cook, a three-story residence on Grand boulevard and Forty-second street, steam heat, bathrooms, mantels, stained, plate and beveled glass; also getting out plans for a three-story residence to be erected at Woodlawn, St. Lawrence marble front, hot water heating, mantels, etc.; cost $12,000. For O. W. Marble et al., seven three-story and basement residences to be built on the South Side, stone fronts, furnaces, bathrooms, mantels, hardwood finish, etc.; cost $70,000. For H. C. Van Schaack, a three-story residence to be erected at 2306 Calumet avenue; raindrop, brown stone front, hot water heating, etc.; cost $25,000.

Architect M. E. Bell is preparing plans for a propagating house, size 100 by 220 feet, to cost $15,000, to be erected in Lincoln Park. It will be constructed of stone, brick and iron, and will contain heating apparatus for palm house, etc. The basement will be used for storage purposes.

Architect J. J. Kouhut is making plans for six three-story residences to cost $8,000 each, to be erected on Shields avenue between Thirty-first and Thirty-second streets, for N. Jacobson. St. Louis pressed brick and Bedford stone fronts, furnaces, wood mantels, bathrooms, stained, plate and beveled glass.

Architect N. D. Little is getting out plans for a residence to be built on Ellis avenue near Forty-fifth street. Brick and stone, furnace, mantels, stained, plate and beveled glass, etc.

Architect G. W. Maher: For A. F. Shuman, three two-story dwellings, hardwood finish, mantels, bathrooms, stained, plate and beveled glass, furnaces, etc.; cost $15,000. Making plans.

Architects Lamson & Newman: For J. W. Jones, a two-story residence on Vernon avenue near Forty-fifth street. Stone front, copper and slate roof, furnace, mantels, etc.; cost $10,000. For D. S. Thompson, a two-story residence on Rhodes avenue near Forty-third street. It will have a beautiful carved stone front, stained, plate and beveled glass, furnace, mantels, etc.

Architect Robert Rae: For James A. Parish, seventeen two and three story dwellings on Berkley avenue between Forty-fourth and Forty-fifth streets. Stone fronts, mantels, bathrooms, stained glass, furnaces, etc. Finishing plans.

Architect J. S. Woollacott: James C. Thomas, three two-story and cellar dwellings, on Forty-second street near Drexel boulevard, stone fronts, furnaces, mantels, stained glass, etc.; making plans. For Mr. Carroll, a three-story store and flat building on Fullerton avenue, pressed brick and stone front, bathrooms, closets, mantels, stained glass; cost $15,000; preparing plans. For the same owner, a three-story dwelling on Fullerton avenue, furnace, mantels, stained glass, etc.

Architects Beers & Lane: For O. French at Evanston, a two-story frame residence, furnace, bathroom, mantels, stained glass, etc.; making plans.

Architect J. E. O. Pridmore: For J. W. James, a three-story store and flat building on Forty-third street, Bedford stone and Tiffany pressed brick front, copper bays, mantels, stained glass, etc.; cost $11,000. For F. H. Winston, a four-story store and flat building on Clark street near Chicago avenue. Tiffany pressed brick and stone with copper bays, etc.; cost $14,000; making plans. For Shaw & Coates, three two-story dwellings on Ellis avenue near Forty-fourth street, stone fronts, furnaces, mantels, stained glass, etc.; cost $20,000; preparing plans. Also making sketches in conjunction with J. W. Morrison for a three-story hotel, size 100 by 200 feet, to be built at Kearney, Nebraska, steam heat, elevators, electric light, to be fireproof, etc.; cost $100,000.

Architect L. H. Heinz: For F. Schraum, a two-story flat building on School and Fifty-third streets; pressed brick and stone; bathrooms, mantels, stained glass, etc. For J. Haehnle, a three-story addition to building on Twenty-first and Wood streets.

Arcbitect Swen Linderoth: For William J. Bell, nine two-story dwellings at Auburn Park; frame, stone basements; mantels, stained glass, bathrooms; cost $25,000; preparing plans. Also making plans for three-story flat building, to be built on Erie street near Ashland avenue.

Architect F. L. Fry is preparing plans for Methodist Church, to be erected at Hermosa; frame, stone foundation; furnace, stained glass, opera chairs, etc.

Arcbitect R. T. Newberry: For C. W. Lasher, a three-story residence, to be built on Wellington avenue, Lake View; Colorado peachblow stone front; steam heat; stained, plate and beveled glass, etc.; cost $25,000. For N. L. Hansen, on Drake street, a block of three dwellings; bathrooms, closets, mantels, etc. For Mrs. Soubra, a three-story dwelling on Sixteenth street and Michigan avenue; stone front; steam heat, bathrooms, closets, mantels, etc.

Architect Wesley A. Arnold: For E. C. Baker, a two-story residence at Oak Park; frame, stone basement; hot water heating; bathroom, mantels, stained glass, etc.; cost $8,000. For D. R. Niver, a two-story residence at Evanston; frame, stone foundation; hot water heating, mantels, bathrooms, stained glass, etc.; cost $10,000; preparing plans.

Architects Frederick Baumann and J. K. Cady are preparing plans for an eight-story office building, size 44 by 101 feet, to cost about $100,000, to be erected at 123 and 125 La Salle street. It will have a handsomely draped front of pressed brick and terra-cotta; steam heat, elevators, electric light, etc. Also making plans for a two-story frame residence, to be erected at Winnetka, for H. V. Mann; furnace, mantels, etc. Also getting out plans for thirty stores and flats to cost about $200,000, to be erected on the West Side.

Architect C. H. McAfee: For P. J. McGinnis, a three-story residence to cost $15,000, to be built on Diversey avenue near Lincoln Park; Dell Rapids granite front, hot water beating, etc.

Architects Schaub & Berlin: For Q. Rigeneri, a four-story flat building, corner Franklin and Hill street; pressed brick and brown stone, bathrooms, mantels, stained glass. Also making plans for a three-story flat building, to be built on Webster avenue; bathrooms, closets, etc.

Architects Griesser & Maritzen: For the Gottfried Brewing Company, on Archer avenue and Seward street, brewery plant, to cost $250,000; making plans. For the Fecker Brewing Company, on Dudley street, a complete plant, to brew 50,000 barrels a year. For Gerhard Lang's Park Brewery, Buffalo, New York, a two-story office building, to cost $50,000; a 400,000 bushel elevator, malt house, malt kiln, brew house, etc., iron construction, cost $500,000. Also just finishing up the American Brewing Company's establishment on North Ashland and Clybourn place, at a cost of $400,000. For Metsheimer, Mack & Company, at Denver, Colorado, a 250,000 bushel elevator, ice house, malt house and brew house, to make 100,000 barrels a year; cost $300,000; making plans. Also getting out plans for a Turner Hall, to be erected on Blue Island avenue and Paulina street. For the C. Haehnle & Co. Brewing Company, at Jackson, Michigan, a brew house, storage house, ice machine house, boiler house, etc.; cost $50,000; making plans.

Architects Adler & Sullivan are preparing plans for remodeling the Grand Opera House in Milwaukee. Also drawing plans for a $300,000 hotel, to be erected at Salt Lake City.

Architect Charles S. Frost is getting out plans for the American Bank Note building, to be erected corner of Michigan avenue and Madison street.

Architect J. H. Huber: For John Norton, a four-story store and flat building, corner of Chestnut and State; Bedford stone front, steam heat, etc.; cost $30,000; making plans. For P. Bonnet, a four-story store and flat building on Elm and State; stone front; cost $16,000.

Architects Flanders & Zimmerman: Preparing plans for a three-story store and flat building on Thirty-fifth and State; pressed brick, stone and terra cotta; cost $15,000. Also working on plans for a four-story apartment building, to be erected on Calumet avenue near Twenty-fifth street; steam heat, mantels, bathrooms, etc.; cost $15,000. Also just commenced work on residence on Ashland avenue near Polk street, for O. H. Oliver.

Architects Howe & Shelton: For S. Schwarzschield, a two-story flat building, at 3515 Stanton avenue; pressed brick and brown stone, bathrooms, mantels, stained glass. For the same owner, at 3517 Stanton avenue, a two-story dwelling; furnace, mantels, bathroom, stained glass, etc.; making plans.

Architect Robert Rae: For Joseph Wells, a two-story frame residence to be erected at Ravenswood. Furnace, bathroom, mantels, etc.; cost about $10,000. For G. S. Swift, eight two and three story dwellings to be erected on Berkley avenue between Forty-fourth and Forty-fifth streets. Furnaces, mantels, bathrooms, etc.; cost about $50,000. Also just sent out plans for a bottling establishment to be erected at Seattle, Wash.

Architect Otto H. Matz: For Eureka Tobacco Works, five-story brick addition, 20 by 150 feet, North Clark and Maple streets; cost $10,000. For Rudolph Weber, 31 Washington street, additional story and remodeling building; two boilers, steam heating, Edison electric plant, two Hale elevators, new iron front, interior antique oak finish, etc.; cost $35,000. For W. McGushin, three-story and basement flat building, Wabash avenue; pressed brick, brownstone front, stained glass, etc.; cost $10,000. For Merchants' National Bank Building, La Salle street, remodeling; $5,000.

**Cincinnati, Ohio.**—Reported by Lawrence Mendenhall:

Interviews with contractors in several branches develop no uneasiness as regards strikes; and unless lightning strikes unexpectedly (as it generally does), all the trades will be well employed. I never saw more favorable indications for a profitable season. Although others may think differently, I believe in allowing the laborers to work their own ruin by acceding to ALL their requests. Charge increased wages to the owner when bid is made. This will make building come too high, which in turn will stop it, thus throwing the mechanic out of employment.

Architect Gustave W. Drach: For L. A. Strobel, a residence; materials, frame and shingles, slate roof, stained glass, pine finish, plumbing, gas fixtures, etc.; cost $4,000. For Mr. William Brothers, a residence; materials, frame and shingles, pine finish, blinds, slate roof, wood mantels, furnace, plumbing, gas, stained glass, etc.; cost $4,500.

Architect A. O. Elzner is preparing plans for remodeling the residence of Adolph J. Seasongood, Esq., banker. His time is well employed on sketches not ready to report.

Architect William Martin Aiken has prepared plans for a residence for F. Jelke, Jr., Fifth and Main streets; materials, brick and frame, slate roof, stained glass, hardwood finish, wood mantels.

Architects Crapsey & Brown: For the Methodist Episcopal Church, Price Hill, city (J. C. Harper, Esq.), a church of stone and shingles, to cost $8,000; Jas. Harwood & Son, contractors. For A. R. White, Jr., Wyoming, Ohio, a residence; materials, frame, slate roof, stained glass, wood mantels, plumbing, hardwood finish, furnace, etc.; cost $8,000. For Robert B. Burnam, Richmond, Kentucky, a residence; materials, pressed brick, electric bells, slate roof, hardwood finish, blinds, plumbing, mantels, stained glass, etc.; cost $7,000. For Methodist Episcopal Church, at Morristown, Tennessee, a school and dormitory building; material, brick, slate roof, pine finish, steam heating, etc.; cost $25,000. This firm has its hands full with church plans, some of which have been reported.

Architect S. S. Godley: For Mr. E. F. Rychen, Price Hill, a residence; materials, brick, hardwood finish, wood mantels, stained glass, plumbing, gas fixtures, laundry fixtures, slate roof, electric bells, etc.; cost $10,000. For M. M. White, Third and Walnut streets, a store; materials, brick, stone, elevators, iron, metal roof, etc.; cost $14,000.

Architects G. & A. Brink: For Edward Hendricks, a store and flat building; materials, iron, brick, pine finish, wood mantels, plumbing, laundry fixtures, etc.; cost $11,000. For Mrs. M. Boerger, city, a tenement house; materials, brick, stone trimmings, iron mantels, plumbing, gas fixtures, tin roof, etc.; cost $5,000.

Architects Reig & Marty: For Ulrich Pauzer, a tenement house; materials, brick, tin roof, grates, iron mantels, plumbing, blinds, etc.; cost $6,000.

Architect W. W. Franklin: For Mrs. Ellen Hayes, residence; materials, pressed brick, hardwood finish, wood mantels, furnace, stained glass, plumbing, gas, blinds, slate roof, etc.; cost $5,500. He is also drawing plans for Mr. B. Weiss, 234 W. Fourth street, city.

Architect J. W. McLaughlin is busy on the drawings for the Young Men's Christian Association building, on Mabley & Carew building, and on alterations and additions to Mr. J. R. Carew's residence, each of which will be very complete in details and improvements.

Architects S. Hannaford & Sons report plans for the rebuilding of the Nevada building, belonging to Jas. M. Glenn, Esq.; materials, pressed and stock brick, iron, elevators, plumbing, etc.; cost not given.

Architect George F. Vogel: For Charles Ellerharste, Pine street, Bellevue, Kentucky, a residence; materials, pressed brick, stone, terra cotta, hardwood finish, mantels, stained glass, laundry fixtures, plumbing, slate roof, etc.; cost $7,000.

Architects Des Jardins & Hayward: For Mr. Charles F. Seaman, a residence; materials, frame and shingles, pine finish, wood mantels, plumbing, laundry, stained glass, etc.; cost $5,000.

Architect W. S. Robinson: For F. C. Grote, a residence; materials, brick, frame and shingling, pine finish, iron and wood mantels, plumbing, laundry, stained glass, slate roof, etc.; cost $6,000.

Architect Emil F. Baehr: For Mr. J. H. Twachtman, a residence; materials, brick, pine finish, blinds, tin roof, plumbing, gas, wood mantels, etc.; cost $6,000.

**Cleveland, Ohio.**—Much building is in progress here, but labor troubles put all at sea as to the outlook just now.

Architect Clarence O. Arey: For the Case School of Applied Science, a three-story school building; fireproof; steam heat; size 92 by 160 feet; cost $23,000.

Architects Blackburn & Daniels: For M. B. Clark, a three-story flat building, size 52 by 76 feet; brick and stone; cost $15,645.

Architect F. C. Bate: For E. S. Isom, a two-story double dwelling, size 28 by 51 feet; brick; cost $4,500.

Architect S. R. Badgley: For Mary E. Richards, a two-story dwelling, size 32 by 48 feet; frame; cost $6,500.

Architects Cudell & Richardson: For the Montefiore Jewish Home, addition of a three-story home, size 45 by 76 feet; brick and stone; cost $20,000.

Architects Coburn & Barnum: For the Bohemian Missionary Board, a two-story Bible School, size 40 by 64 feet; frame; cost $7,000. Also for Margarette Oerl, a two-story frame dwelling, size 24 by 55 feet; cost $4,500.

Architect W. H. Dunn: For the Board of Education, a three-story schoolhouse, size 120 by 150 feet; brick and stone; cost $75,000. And for the same, a two-story schoolhouse, size 115 by 150 feet; brick and stone; cost $49,000.

Architect John Eisenmann: For Dr. Erastus Cushing, a four-story store and warehouse block, size 32 by 104 feet; brick and stone; cost $35,000.

Architect G. F. Hammond: For L. A. Gleason, alterations to dwelling; cost $6,000.

Architect T. W. Hardek: For C. E. Crawford, a two-story frame dwelling, size 34 by 58 feet; cost $6,500.

Architect B. F. Vandevelde: For Pletcher Bros., a two-story store and dwelling; cost $8,000. Also for A. Zedler, a two-story store and dwelling, size 38 by 60 feet; cost $6,500.

Architects' names not reported: For the Barckes Wire Nail Company, a one-story brick factory, size 76 by 390 feet; cost $16,000. Also a 73 by 297-feet factory house; cost $9,000. For the Cleveland Gaslight & Coke Company, a two-story retort house, size 74 by 108 feet; cost $5,000. For C. Stocke, a three-story store and hall building; cost $11,000. For E. A. Cass, a two-story frame dwelling, size 27 by 44 feet; cost $5,000. For Ignatius College, a four-story alteration and addition; cost $25,000. For Anton Sacha, a two-story store and dwelling, 40 by 60 feet; cost $5,000. There were 189 permits granted in April for alterations and additions, $204,695; 296 for wood and frame, $311,793; 15 for brick and stone, $245,577.

**Denver, Col.**—Architects Huddart & Jacobson: For J. E. White, a two-story stone residence, size 46 by 71 feet; cost $13,000. For A. L. Parson, a three-story brick and stone hotel, size 50 by 100 feet; cost $27,000. For W. H. Maloney, a three-story block, size 40 by 65 feet, stone and brick; cost $18,000. For C. Beottchers, a three-story residence, size 60 by 80 feet; brick and stone; cost $41,000. For Murry & Pierson, the Arcade Building, three stories, stone, size 40 by 110 feet; cost $38,000.

Architect Robert S. Roeschlaub: For St. Peters Episcopal Church, Pueblo, stone church building, rectory and parish house; will cost $80,000. For State of Colorado, normal school, Greeley; pressed brick, stone and terra-cotta; two stories and basement; cost $35,000. For the University of Denver, a lava stone observatory building.

Architect L. M. Wood: For Isaac E. Blake and Charles H. Smith, a six-story office and store building, pressed brick and granite; cost $250,000. For Charles Wheeler, two-story brick residence; cost $10,000. For Charles Wheeler, office and store building, three stories, brick; cost $25,000. For Mrs. M. D. Wood, terrace, two stories, brick; cost $10,000.

Architect Franklin Goodnow: For George Barrett, dwelling, two stories, of pressed brick; cost $6,000. For R. S. Mainday, two-story, pressed brick dwelling; cost $10,000.

Architects Varian & Sterner: For S. L. Holzman, two-story residence; cost $25,000.

**Detroit, Mich.**—Architects Scott, Kamper & Scott: For the Michigan Stove Company, a seven-story addition, size 60 by 140 feet, brick with tin roof; cost $35,000. For Charles S. Richter, alterations of café; cost $5,000. For the Detroit Electrical Works, a three-story factory, size 120 by 150 feet, brick and stone; cost $30,000.

Architects Mason & Rice: For A. L. Stevens, a three-story stone residence, size 70 by 60 feet; cost $51,000.

Architect P. J. Deitrich: For H. A. Rickel, two-story double brick residence, size 40 by 60 feet; cost $5,500.

Architects Malcomson & Higginbothom: For R. Bell, a two-story double brick dwelling, size 36 by 56 feet; cost $6,000.

Architect Hy J. Kill: For Nathan Wolfe, six two-story dwellings, size 100 by 90 feet, brick; cost $12,000.

Architects M. L. Smith & Son: For M. M. Fisher, a three-story residence, size 48 by 76 feet, pressed brick and stone, slate roof; cost $20,000.

Architects A. C. Varney & Co: For Parke, Davis & Co., three-story brick factory and barn, size 60 by 200 feet; cost $12,000. For the Hunt Chair Manufactory, a three-story brick factory, size 50 by 120 feet; cost $10,000. For the Wolverine Specialty Manufacturing Company, a three-story engine house, size 50 by 100 feet, brick; cost $10,000. For the Dailey Preserving Company, three-story brick manufactory, size 200 by 145 feet; cost $10,000.

Architects Donaldson & Meier: For C. H. Haberkorn, a three-story brick store, size 36 by 60 feet; cost $6,000.

Architect Gordon W. Lloyd: For David W. Gitney, Jr., a three-story brick residence, size 50 by 120 feet, Sioux Falls granite; cost $60,000. For St. Mary's hospital, a four story addition, size 72 by 162, brick and stone; cost $50,000.

Architect George H. Edbrooke: For Mrs. E. Hammond, a brick and stone residence; cost $50,000.

Architects Hess & Rassman: For the Detroit *Daily Abend Post*, a four-story block, size 135 by 200 feet, pressed brick and stone; cost $40,000.

**Duluth, Minn.**—Architect E. S. Radcliffe has prepared plans for a $30,000 store and office building for W. E. Woodbridge.

Architect Palmer has completed plans for the Central High School, size 281 by 160 feet, red sandstone with terra-cotta trimmings.

**Elkhart, Ill.**—The Gillett Memorial Chapel, by Architects Bullard & Bullard, of Springfield, is being constructed of Grafton limestone with trimmings of Whitney granite. The stone work will be rock faced, broken range work, the walls on the interior face being same work, less rugged and bold. The tower-like belfry will be filled with a chime of bells. The door frames and doors will be of copper-bronzed iron work, also the window frames. Floors of tile, plain in center, and a narrow border along the walls. Warmed with an air furnace; cost $12,000.

**Fredonia, N. Y.**—Architect E. A. Curtis reports: Plenty of work in prospect if labor market gets firmly established. For Fredonia, New York, a town hall and opera house, three-stories, size 84 by 174 feet; brick and stone, slate roof; steam heated; cost $40,000. For Village of Friendship, New York, a two-story brick schoolhouse, size 67 by 73 feet; cost $20,000. For Mr. Theodore Reuting, Titusville, Pennsylvania, a two-story store, size 54 by 80 feet; brick and stone; cost $12,000. For The Titusville Iron Works, a one-story machine shop, size 44 by 100 feet; brick and iron; cost $18,000. For R. G. Lamberton, of Franklin, Pennsylvania, alterations and additions to residence; cost $10,000. Also, for John O. McCalmot, a two-story frame residence, size 56 by 60 feet; cost $6,000.

**Grand Rapids, Mich.**—Architect S. J. Osgood: For Dr. A. B. Botsford, a business block, red brick and stone; estimated cost $35,000.

Architect W. G. Robinson: For A. J. Brown, a brick and stone business block; cost $20,000.

**Knoxville, Tenn.**—Architect George F. Barber reports the following residences to be erected this season: For H. B. Lindsay; cost $5,500 For H. H. Kincaid; cost $4,500. For J. C. White; cost $4,500. For W. L. Haworth; cost $3,500. For T. J. Egleston; cost $3,500. Also, for W. Wiess, of Beaumont, Texas, a $7,500 residence.

**Little Rock, Ark.**—Architect, C. L. Thompson: For W. H. Ragland, a brick veneered residence; cost $10,000.

Architect Fred J. H. Rickon is preparing plans for a five-story store and apartment building, size 100 by 133 feet, to be erected here at a cost of $50,000. Also, for M. Cohn, a two-story frame residence; cost $2,500.

The Masons will erect a new temple at the corner of Main and Fifth streets, to cost $75,000. No plans have been decided on yet. The building committee is Major John D. Adams, J. A. Henry, George Dodge and George H. Meade.

**Murfreesboro, Tenn.**—Architect George F. Barber: For J. H. Nelson, a $15,000 residence. Also for W. B. Earthman, residence; cost $8,000.

**Oil City, Pa.**—Architect E. A. Curtis: For The Oil City Boiler Works, a two-story machine shop, size 119 by 64 feet, brick with slate roof; cost $24,000. For The First National Bank, a four-story bank, store and office block, size 75 by 83 feet, brick and terra-cotta, tin roof; steam heated; cost $42,000.

**Omaha, Neb.**—Architect Sidney Smith: For J. A. Bevan, a three-story tenement block, size 46 by 132 feet; cost $30,000. For I. C. Schuwden, three-story store and office, size 25 by 75 feet; cost $8,000. For A. Donnaghue, a two-story frame residence, size 26 by 56 feet; cost $5,000. For I. H. Parrooth, a two-story frame residence, 26 by 60 feet; cost $3,500.

**Pittsburgh, Pa.**—Architects Bickel & Brennan: For Mr. John, a four-story hotel, size 28 by 70 feet, brick and stone; estimated cost $15,000. For Mr. Reuben Rutter, a brick residence; cost $6,000; contract not let.

Architect J. E. Ortz: For Theodore Weiss, a three-story brick store; cost $6,000. For Mr. George Schmidt, a double brick house, pressed brick front with stone trimmings; cost $6,000 each.

Architects Longfellow, Alden & Harlow: For Mr. John T. Wilson, two brick houses with all modern improvements; cost about $22,000.

**Rochester, N. Y.**—Architects Jay Fay and O. W. Dryer have prepared plans for a Students' Home to be built by the German Baptist Educational Association; it will be a stone and brick building, four stories, size 60 by 145 feet; arranged to accommodate one hundred students; fitted up with gymnasium and all latest improvements in lavatories, laundries, etc.; cost $35,000. Also plans for a stone and brick block of two stores and four flats, for George J. Hurtyburger, size 40 by 75 feet, three stories; cost $12,000. Also plans for a brick block of two stores and six flats, to be built on West avenue, for Rev. J. A. Daley, to be 27 by 60 feet, five stories; cost $10,000. And alterations of a brick building into a block of six stores and nine flats, for Rev. J. A. Daley; to be four stories, 66 by 50 feet; cost $10,000. Plans for a frame store for Mrs. Yetta Finklestein; cost $5,000. For Mr. O. C. Dryer, a stone and frame dwelling, to be built on Brunswick street; cost $6,000. For Mr. Jay Fay, a stone and frame dwelling on Brunswick street; cost about $6,500. For Jay Fay and O. W. Dryer, two stone and frame dwellings on Oxford street; to cost $6,500 each. Also on Oxford street, a stone and frame dwelling for Charles Dryer; cost $6,000.

Architects Rogers, Sturges & Stern have made drawings for a double frame house for A. C. Schaffer; cost $5,000. Store and office building at Dansville, New York, for Wm. Cramer, to be of stone, brick and galvanized iron; cost $10,000. Frame house for M. J. Castello; cost about $3,500.

Architect Thomas Nolan has let contracts for a stone and brick manufacturing building, to be built on North Water street, for the Rochester Power Co.; cost about $23,000. A sanitarium, to be built at Warsaw, New York, special attention being given to the various baths; to cost about $25,000.

Architect Wm. C. Walker has made drawings for a block of five stores and twelve flats, to be built on South St. Paul street for S. N. Oothout; to be of brick and stone, four stories; cost $20,000. Also an apartment building, just completed, for S. N. Oothout; cost $35,000. For E. J. Chapman, a frame dwelling, to cost about $5,000. A stone and brick dwelling, to cost $15,000. And another to cost $12,000; both to be fitted up in best manner, hardwood finish, electric work, steam heating, etc.

**Spokane Falls, Wash.**—Architects Gunther & Weeks have prepared plans for a $30,000 brick and stone business block.

**Tacoma, Wash.**—Architects Clement & Co. have prepared plans for a $6,000 school building.

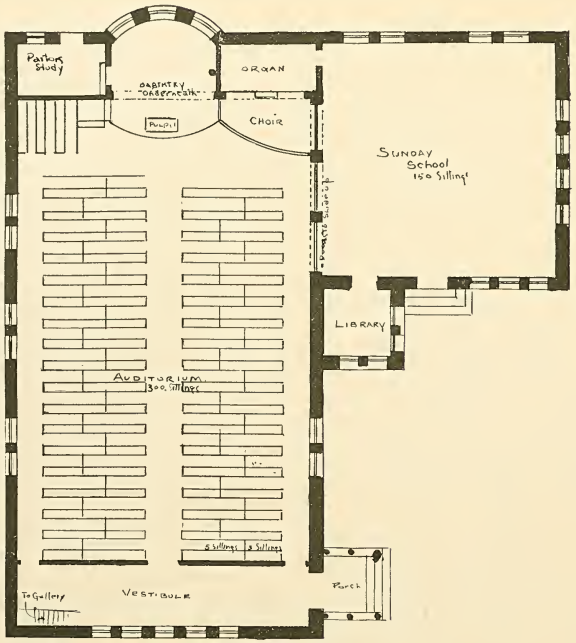
**Toledo, Ohio.**—Architects Bacon & Huber: For Charles E. Kaufman, a three-story business building, brick and stone; cost $10,000.

Architects E. O. Fallis & Co: For M. Bartlett, a four-story brick and stone mercantile building; cost $15,000.




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MAHER & CORWIN, ARCHITECTS.



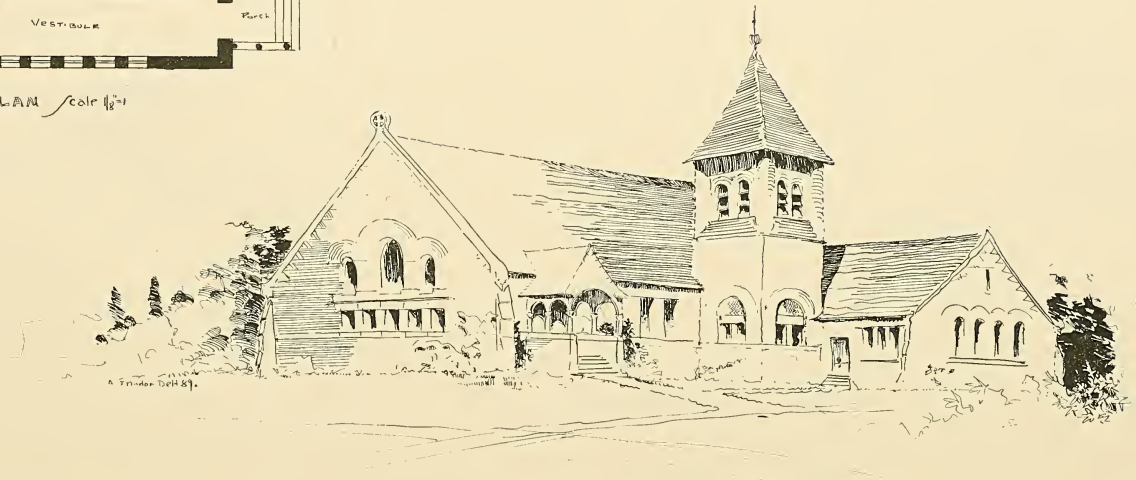

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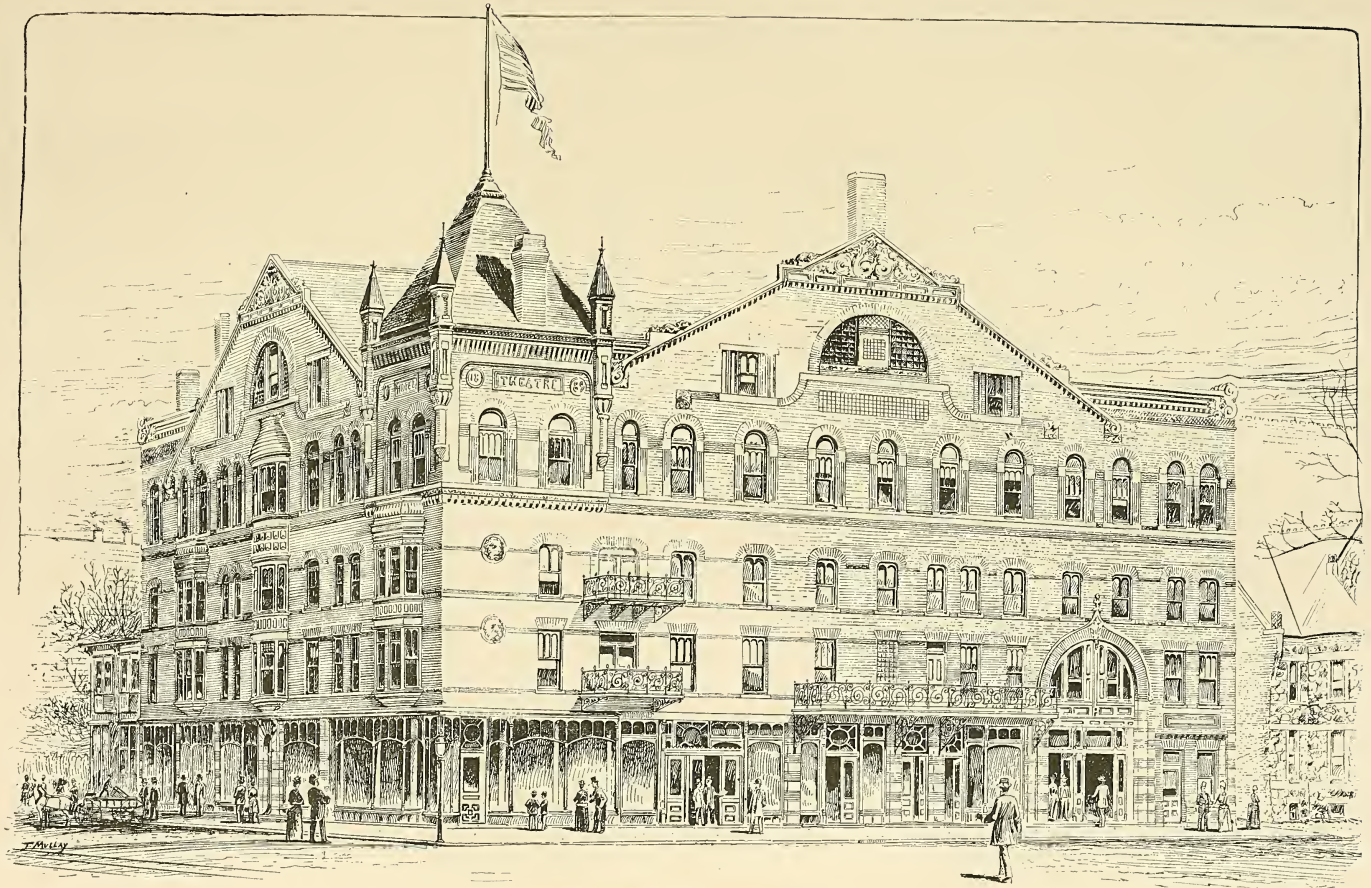
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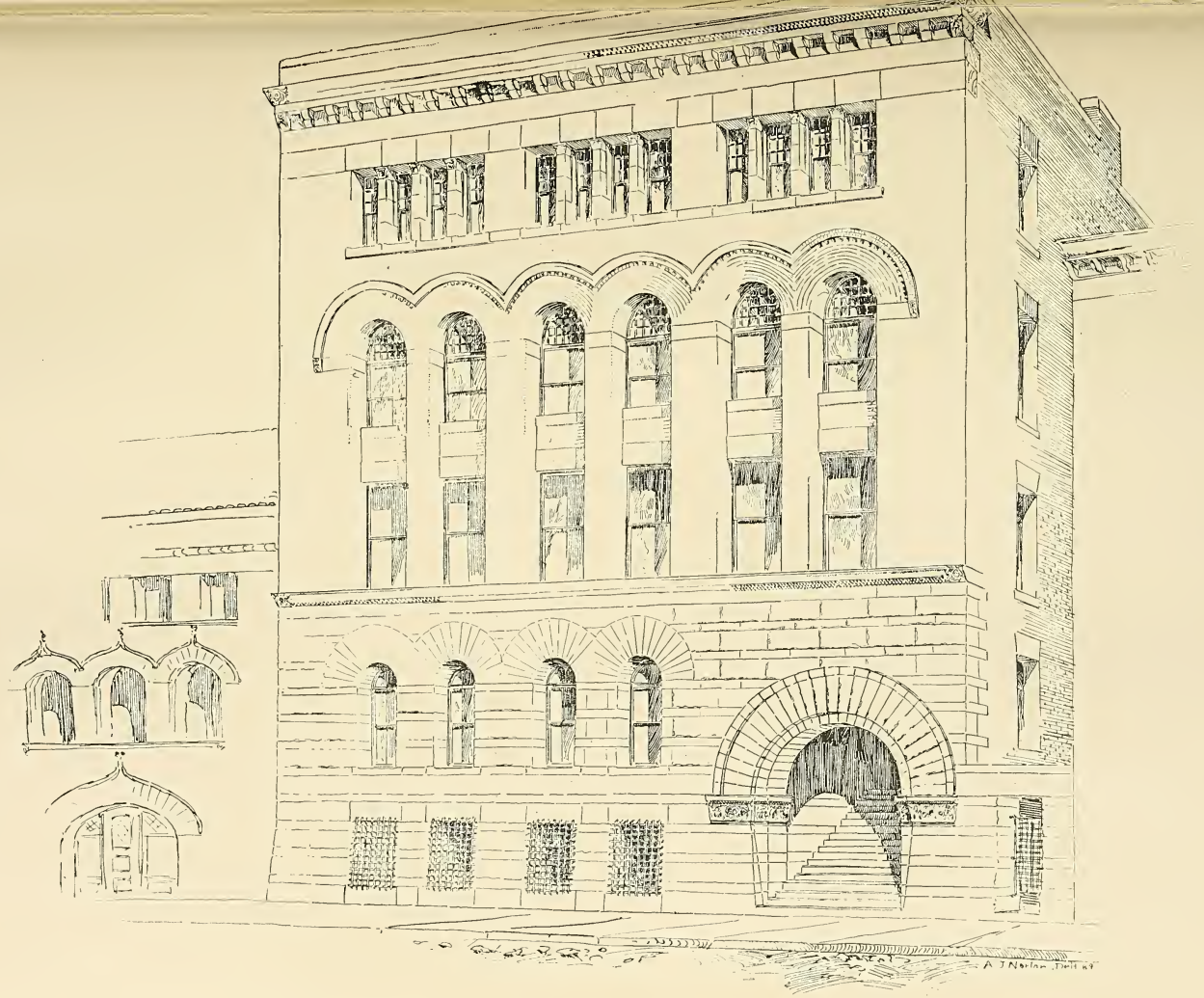


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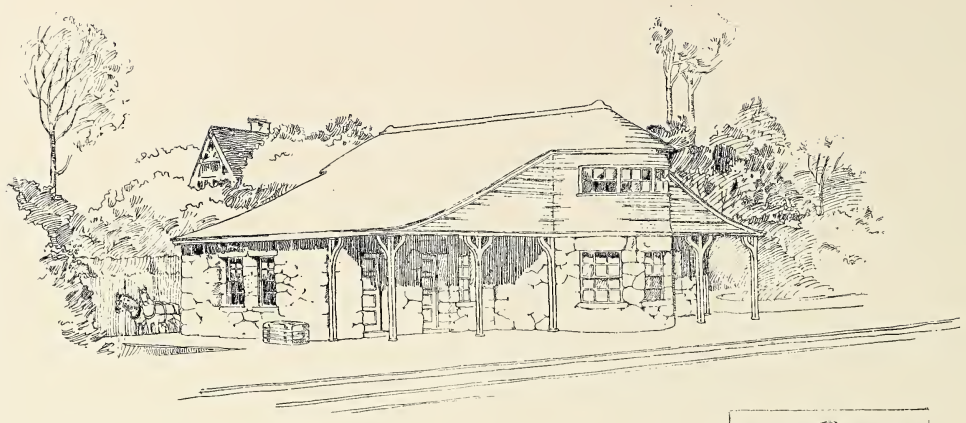


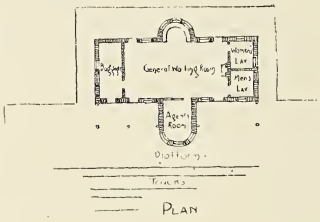
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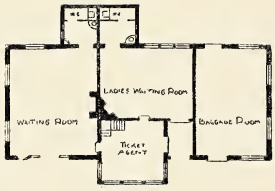
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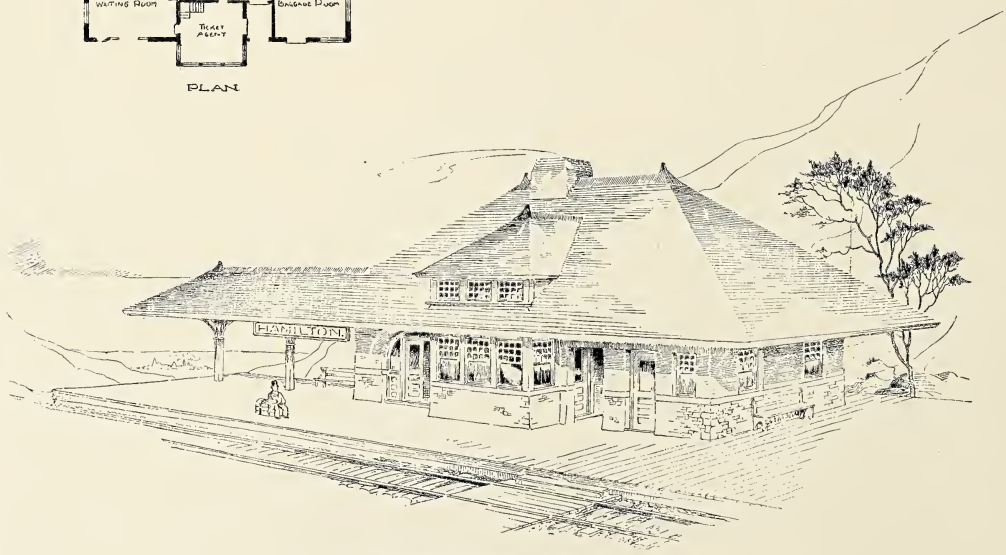
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# THE INLAND ARCHITECT AND NEWS RECORD

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JUNE, 1890.


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AND NEWS RECORD.

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CONSTRUCTION, DECORATION AND FURNISHING

IN THE WEST.

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**The Strike Epidemic Among the Carpenters.**

What we believe will prove the last organized attempt to establish unions in the carpenter trade for many years has been made and has failed. An organization with headquarters in Philadelphia, and a head mouthpiece called grand secretary or something, named McGuire, has agitated the amalgamation of all existing unions among carpenters. True, there never has been a basis upon which effective work in this line could be done, owing to the fact that good carpenters could remain employed at good wages without the questionable aid of a union, and would, when left to their voluntary action, refuse to join with the unskilled and unreliable in the trade, with the prospect of a strike and being needlessly thrown out of work as a result. This "secretary," self-constituted champion of downtrodden labor, with too small a knowledge of the use of tools to lay a joist, or with too large an estimate of his ability as an agitator to be willing to work for a living, has, through his satellites in the different cities of the country, succeeded in inaugurating strikes that have done an enormous amount of damage to the journeymen carpenters, not only among those who joined the unions (for the suppression of honest labor), but to all others as well. We need not follow the history of this great "conspiracy" to its conclusion. The effect has been most disastrous to the journeymen carpenters, but has fallen heaviest upon those who, listening to the specious arguments of the agitator, mistook a union in imbecility and crime for a union in honorable fraternity. Chicago was selected as the seat of war, the theory being that if made a "union city," victory elsewhere would be easy. It is true that carpenters were working eight hours and for as good wages as anywhere in the country; the men were satisfied, as the approaching World's Fair was bringing a constantly increasing demand for labor; and, on the other hand, thousands of carpenters in other cities and towns were unemployed, but the head agitator laid the plan, his satellites commenced to act in concert, and a strike was directed. The result was, the union met an opposition that could not be broken, and after two months spent in idleness they find the places they left filled with strangers who are guaranteed work for at least a year to come. Over 2,000 men have applied for work at the association headquarters alone, and so effective has been its liberal advertising for men that a contractor who lost twenty-eight men through discharging a foreman at 4 o'clock in the afternoon, had filled their places before 6 o'clock. Meanwhile, strikes were inaugurated among the carpenters in Detroit, Louisville, Denver, Omaha, San Francisco, Wheeling, Kansas City, Pittsburgh, Rochester, and other cities, but with the same result as that in Chicago. In each city the main demand was for the recognition of the union, and in each case the contractors have refused to entertain any proposition from such bodies, declaring that it was their privilege to retain control of their business, and that the only parties they could treat with were the men employed by each individual. If this movement had originated from any injustice or from any real cause that called for remedy, it might have been successful, but being built upon the personal agitation of those who sought to obtain money from soft positions as strike managers or strike missionaries, rather than by hard work, it has utterly failed. Men who believed that in union

was strength, and were willing to aid in the support of a beneficial and fraternal organization, have found that membership in those at present established is dangerous to their interests, and brings disaster upon them without remedy. It is hoped that the lesson has this time been well learned. That the leaders of unions at the present day give little consideration to the real interests of the workingman, and that from the lowest to the highest of those who stir up discontent and get them to strike, do so more to help themselves personally, and earn salaries as union officials, than for any desire to advance the interests of the workman.

The Prosecution of Striking Carpenters in Chicago.

The firm stand taken by the Carpenters' and Builders' Association of Chicago has been noted elsewhere, but one phase of their action has been a decided advance upon any of the methods before employed in the work of sustaining uninterrupted liberty of action, and this is in the guaranteement of work to all employed who do not belong to unions and protecting them from assault. After the first surprise in the union occasioned by the facility with which the places of those who refused to work were filled, the striking carpenters became desperate and organized a picked body of men which they formed into a committee, instructed to patrol the city and compel all men found working to join the union, or to club them from the buildings. The result was that men were set upon while at work and a large number seriously injured. This committee, composed of the worst element in the union, roamed the city, as bloodthirsty and as savage as the Indians of the plains. Like the Indians, they avoided places where the men made a showing of strength and determination and attacked only when they largely outnumbered the workmen. And this is called a country of universal freedom and law. The Indian commits a similar outrage and he is pursued and killed, and in the center of civilization these worse than Indians can hardly be fined when brought to what is called justice. The Carpenters' Association have, however, retained the best criminal lawyers and detectives and are giving their entire attention to the prosecution of every case of intimidation that is brought to their notice. The moral effect has been greater than was hoped. It has shown that workmen are going to be protected and that it is dangerous to transgress the laws.

The Fifty-fifth Annual Meeting of the Royal Institute.

The fifty-fifth annual general meeting of the Royal Institute of British Architects was held in London, May 5. For the first time, the thirty-four members of the council include members (the presidents) of the allied societies in Bristol, Leicester, Liverpool, Manchester, Newcastle, Nottingham and Sheffield. The Birmingham Architectural Association were admitted to the alliance March 9. The number of fellows is 519; associates, 768, and honorable associates, 80. It is noteworthy, as an indication of the strictness of the examination to which applicants for membership are subjected, that only 77 out of 115 candidates for the grade of fellow passed, and for the grade of associate, 54 out of 93 candidates passed. As no essays for the silver medal and 25 guineas offered last year on the subject of "Fenestration — Its Treatment in Secular Buildings of Various Styles," were submitted last year, a similar subject has been set for the current year. During the year, 208 volumes and 223 pamphlets were added to the library, and the attendance of readers numbered 1,039. At the twenty-eight meetings during the year, thirteen papers were read by members. The bill for the registration of architects, which we have noted in a previous number, was to have been up for a second reading on May 14, but the protest of the Institute seems to have been effectual, though the English journals of late date are singularly silent on the subject. When we look at the thoroughness of the work done by the Royal Institute and the allied societies in Great Britain, and the too indifferent attitude of American architects in association affairs, we are inclined to feel that the laxity of practice and ambiguous standing of architecture as a profession is largely due to the professors themselves; for there they are trammeled by custom long established, and by precedent, while with us any good movement can be carried through if the proper public sentiment can be engendered in its favor. The American Institute of Architects, and its allied state and local chapters, is organized on a basis as strong and perfect as the republic itself, and the work the Royal Institute has labored fifty years to accomplish in the line of legal recognition as a profession, by concentrated and persistent effort, could be accomplished in this country in five. To remain inactive in this matter is to acknowledge to the world that, in America, architecture is not a profession, but a trade.

Death of John Carrick, City Architect of Glasgow.

In the death of John Carrick, city architect of Glasgow, the profession loses one of its most valued members. Mr. Carrick was one of the founders of the Glasgow Institute, and in his long career of over thirty years as city architect he has practically built the Glasgow of today. All the public improvements, in the way of widening streets, the enactment of proper building laws and the general work of directing the architectural and esthetical beauty of the city, have been made under his suggestion or direction. In a meeting of the Glasgow Institute a resolution was unanimously adopted, a copy of which was sent to his family, to place upon record their deep sense of the loss sustained the city, the profession and the Institute in his death. His public services cannot be overestimated and his fame was not confined to local limits, but in this country Glasgow was referred to as a city whose architecture was watched over by an architect eminently qualified by training and temperament for the post he filled with such marked distinction and ability.

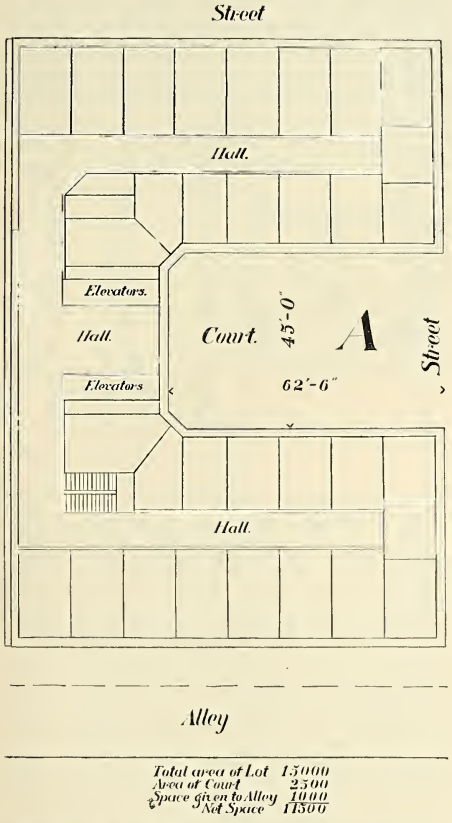
The Workmen's Side of the Strike Question.

There has recently been published, says the London *Builder*, a little pamphlet called "'On Principle' Strikes," by Mr. J. S. Ransome, containing four sketches, which originally appeared in the *Globe*. The author does not improve his chance of success by a title which at first sight puzzles rather than enlightens the reader. But the publication is, nevertheless, apposite; its object is "to point out how little the real interests of the workingman are studied by the leaders of the present day unions." In order to do this, sketches are given of typical persons engaged in strikes. The third sketch is that of "The Shop Lawyer"; in other words, the talking leader, who gradually stirs up discontent, and then gets the men to come out on strike. In this, as in the other sketches, there is a good deal of truth; but, like many sketches with the brush, these with the pen are somewhat overcolored. Yet this is in many ways just the kind of literature to bring home some truths to the mind of the workingman.

## A Great Architectural Problem.*

BY JOHN W. ROOT, ARCHITECT.

LIKE all forms of civilization architectural development has for centuries moved from homogeneity to heterogeneity. As human needs become more complex and as human industries multiply, human habitations take upon themselves forms continually more intricate. But at no time has this development been so rapid as during the latter part of this century. The age of steam has witnessed a material revolution a thousand times more significant and radical than had occurred during all the preceding centuries. In essence the requirements of men, as expressed in their architecture, had remained comparatively simple up to the end of the eighteenth century, and even to the middle of this. The fourteenth century dwelling and




shop combined was, in its essential arrangement, a very simple and obvious affair, whose type had existed in substance for centuries; and the combined shop and dwelling of the last century was scarcely more complex. In the great monuments of early Egypt, of Greece and even of medieval Europe, as well as in such smaller buildings as have survived to this day, very few and very simple ideas dominated the whole structure as well as its art expression. The architect was not distracted, therefore, by antagonistic elements in his problem, but moved straight forward toward a simple and definite result. If called upon to design a temple, he aimed only to produce an edifice which should be a unit within itself, and at the same time expressive of that religious sentiment which was predominant at the time, and whose characteristics were for this reason instinctively grasped by him. If the problem was of some other character it was nearly always marked by equal simplicity of purpose. Even the greatest of castles and palaces in their most complex conditions rarely became more than well-regulated assemblies of simple structures, each one maintaining its own individuality.

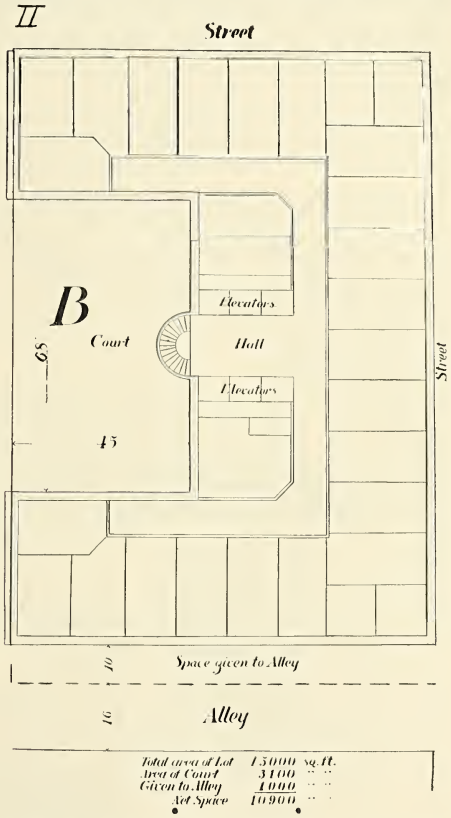
Not only were early buildings comparatively simple because of the simple needs of the inhabitants, but also because of the fact that early architecture was created in climates where an outdoor life was so largely possible and even desirable, that the dwelling, shop or temple itself, being to a large degree unnecessary from a material point of view, took upon itself a much less complex condition than if the climate had been more austere. Thus, being from one point of view unnecessary, or the necessity demanding such structures being comparatively slight, they became in their more enduring forms monumental in the expression of simple ideas, as places for worship and for defense.

Another cause for this obvious and simple expression lay in the fact that the architect was then further than now removed from the mass of people, who, indeed, were ignorant of many of their own physical necessities, as well as of their moral aspirations. He was, therefore, left free to work out his problem undiverted by the thousand considerations begotten of individual caprice.

It was the Renaissance, with its wonderfully vital and complex thought, which first began in a marked way to impress upon architecture the stamp of individual whim or desire; and it is the earlier monuments of the Renaissance, built by men who were still imbued with something of the more primitive and simpler spirit, that remain to us most significant and interesting. For so rapid was the growth of ideas in the Renaissance that even the greatest among the architects of later periods were able only partially to give these ideas adequate realization in architectural form.

In the expression of this straightforwardness of intention, this unity of idea, characteristic of earlier architecture, the Parthenon, the Erectheum, even the great medieval cathedrals like Chartres and Amiens, are the embodiment of ideas in their essence as direct as any picture or statue can be.

But with the enormous growth in wealth and civilization of the northern nations, as well as those in the South since the Renaissance, especially since the beginning of this century, the change has been beyond the wildest flight of the imagination. The luxuries most rare to even great kings like Louis XIV are now the necessities of life to the day laborer; and following every modern necessity is a vast nebulous train of luxuries, whose end may not be seen,




all in their turn to become fixed and solid as necessities. These all demand accommodation and expression in modern architecture, and architecture must meet the demand.

As yet sufficient time has not passed for this expression to be fully wrought out. The age of steam, of electricity, of gas, of plumbing and sanitation, is new. What its impress will be upon man himself no one will venture to prophesy, and this being true no man may foresee how architecture will adjust itself to these changed conditions. Especially is the forecast difficult when we reflect that not only preëxisting types of buildings have been revolutionized by modern needs, but new types have been created adapted solely to the present, and of which twenty years ago no man could

*Paper read before the architectural class of the Art Institute, Chicago. While largely alphabetical, the paper contains much of interest to the architectural reader, being especially valuable for its consecutive review of modern architectural form and practice.

have dreamed. Among these I mention the vast edifices which have lifted themselves in New York, Boston, Chicago and other cities, until they tower heavenward nine, ten, twelve and sixteen stories, containing sometimes three or four thousand people upon whom depend the support of eight or ten thousand souls. These buildings, the result of commercial conditions without precedent, are new in every essential element.

Looking at the problems presented by these buildings, as well as by many others of a different type in a lesser degree, we may certainly guess that all preëxisting architectural forms are inadequate for their solution, and that no logical combination of those forms can be made efficient without changes so great as to be practically destructive.

We must grant that, to be true, architecture must normally express the conditions of life about and within it, not in a fragmentary and spasmodic way, but in the mass and structure ; the life of the building, in large and comprehensive type. As yet the search after a national or new architectural style is absolutely useless for this purpose. Architectural styles, national or new, were never discovered by human prospectors, however eagerly they have searched. Styles are found truly at the appointed time, but solely by those who, with intelligence and soberness, are working out their ends by the best means at hand, and with scarce a thought of the coming new or national style.

Architecture is, like all other art, born of its age and environment. So the new type will be found by us, if we do find it, through the frankest possible acceptance of every requirement of modern life in all of its conditions, without regret for the past or idle for a future and more fortunate day, this acceptance being accompanied by the intelligent and sympathetic study of the past in the spirit of aspiring emulation, not servile imitation. If the new art is to come, I believe it will be a national and steady growth from practical conditions outward and upward toward a more or less spiritual expression, and that no man has the right to borrow from another age an architectural idea evolved from the life of that age, unless it fits our life as normally and fully as it fitted the other. I say practical conditions, and this is fully meant — practical conditions without qualification or abridgment.

Whenever in the past such a full acceptance occurred, and a building was erected in the effort frankly to express the conditions thus accepted, art has been willing and ready to consecrate the effort. But, on the contrary, whenever art has been invoked to abridge in architecture one of those normal conditions, she has been distant and cold.

The ethical proposition is true that the presence of art may be most accurately known in the attitude of the workman as well as in the nobleness of his aim. And yet philosophers and critics have striven to find the path by which artists reached the exalted heights of inspiration, by which genius conceived the immortal monuments of antiquity. The path has not been found by them. But in studying our own age, I believe some guess may be made as to the road by which our own highest level may be reached.

We live in an age beyond all others reasonable. The ethical and art status apparently reached by the Greeks and Venetians through processes almost intuitive, must be reached by us, if at all, by processes entirely rational.

If the problem before us were the design of a temple to Jupiter, with its simple portico and cella, the whole attitude of the mind would be different from that which is demanded in the effort to design in homogeneous and expressive form a great and complex office building of twelve stories, constructed of steel and terra-cotta. Here the pure art expression can, perhaps, never be so high as in the simpler problem for reasons inherent in the problem ; but if it is to be truly an art expression worth considering, it will be reached at the point where intellectual action, intensely concentrated upon vital conditions about and within us, passes into an unconscious spiritual clairvoyance. Here is the path, the end of which, indeed, may not be reached by us, but the effort to reach which will be to move in the right direction.

Criticisms upon art are apt to be unsatisfactory and are often unfruitful, and such I do not propose to essay. It is rather my purpose to enumerate some of the structural and commercial conditions which lie at the beginning of a typical architectural problem of the present, and to indicate something of the methods by which they are met and are given characteristic architectural expression.

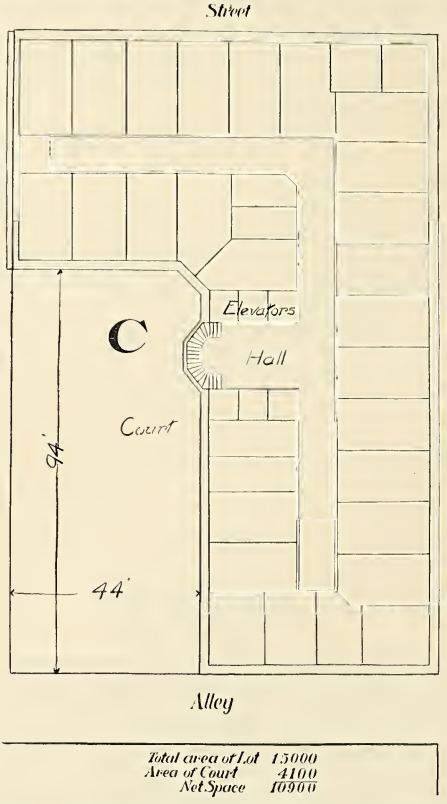
The subject, then, of this paper, to which the foregoing is a preface, is some of the processes by which a large office building in Chicago is evolved, from the time when the site is determined to the time of its occupancy. The subject is chosen because no class of buildings are more expressive of modern life in its complexity, its luxury, its intense vitality. The purely artistic side of the question will not be enlarged upon, because, as I have said, it is the practical and even commercial sides which at this moment need special attention, not so much for themselves, but as factors, and most important factors, in the evolution of every aspect of a great problem ; and which occupy a much greater and more significant relation to the ultimate art expression than has generally been conceded to them.

How much "per cent" has always been considered foreign to art, and generally it is. Yet, curiously enough, it may sometimes guide art, if not positively foster it. Art has never grown vitally without some sort of check, whether in the limitation of the age, the narrow yet intense idea which was the inspiration of the epoch, the specialized occupations of the moment, or some other equally valid cause. And in this age the question, purely commercial, of "per cent" often intrudes itself at a time when thoughtfulness is about to give way to mere lavishness, and asks of the mind the pertinent question "why ?" and in the answer art, if enriched by the splendor of material, is not concluded by it alone, but by the more valuable thing, expenditure of thought.

At the moment when an architect is intrusted with work to be executed by him "regardless of expense," let him beware that he lose not the thoughtful temperateness which should underlie even the most splendid effort. But when a certain income must be derived by revenue from the building designed, every question must be carefully weighed, investigated in every possible light, and the result is apt to be interesting, at least as expressive of thought, and will, if solved with truth and imagination, be also interesting from an art standpoint, as art in architecture is merely the expression in solid material that someone has thought for our comfort and delight.

Let us begin, then, at the moment when the questions involved in such a building arise and are propounded to the architect for solution.

Let us suppose that in the business center of this city a piece of ground has been purchased, lying upon the corner of two prominent streets, the dimensions of the ground being 150 feet north and south, 100 feet east and west, with a 16-foot alley on the south. It is surrounded by buildings averaging in height nine stories, and the average width of the streets on which it fronts is 70 feet, being in one case 66 and in the other 80. Of course, the first radical question to suggest itself is that of light. And this will at once dictate certain general and entirely preliminary conditions of the plan upon the ground. Experience has demonstrated that all spaces within the inclosure of four walls which are not well lighted by sunshine, or at least direct daylight, are in office buildings non-productive. The elementary




| | |
|---|---|
| Total area of Lot | 15000 |
| Area of Court | 4100 |
| Net Space | 10900 |

question, therefore, is how to so arrange the building upon its lot that every foot within it shall be perfectly lighted, and all spaces which would be dark thrown out. To ascertain this it is necessary to know by experiment to what depth from the front wall daylight will reach, upon the average, in a story of convenient height, and giving to the space to be lighted the largest possible windows. This has been found to be in Chicago not more than twenty-four feet, assuming the height of the story to be about eleven, and the window to be placed close to the ceiling, the average street width being assumed. This fact will, of course, dictate in general our depth of offices.

Taking the lot of 150 by 100 feet, as given us, the first method or general disposition or plan which suggests itself will perhaps be a central court. It is found at once that this plan is not feasible, for there is not sufficient width in the lot to give light to the interior tier of offices opening upon this court.

A second plan would be an open court facing the east. This has manifest advantages, as will be seen by this diagram plan. (Diagram A.) A large amount of office space is here obtained, all of which would

seem to be well lighted, and all of which would have open aspects to the street. An objection, however, to this plan, consists of the fact that the south wing of the building would constantly throw its shadow across the narrow court whose smallest dimension is north and south, whereas the distance north and south should be its greatest dimension to fully admit sunshine. Another criticism is that at a time when light is most valuable and most difficult to obtain — late in the afternoon — the court is thrown into shadow by the main portion of the building. Still another objection would lie in the fact that the court being so

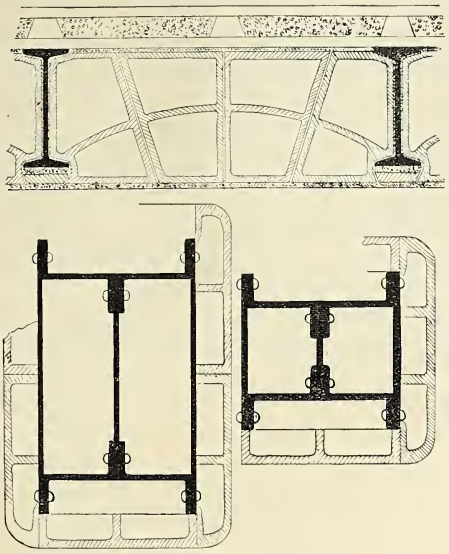


FIG. 1.

essentially a part of the street façades, it would scarcely be possible to face its walls with a material which would brilliantly reflect the light, as such a treatment would cut the main façade into three pieces and destroy all architectural unity of expression.

The next idea would be to place the court within the building and to the west of it, as illustrated in plan B. Here only one tier of offices is placed to the north and south of the court, and the plan seems to present many advantages. It is necessary, however, in order to get even moderately good light in the south tier of offices, that the width of the alley should be considerably increased. Let us do this by ten feet, using the widened alley for light. The court in the center, of a very good size, with its longer axis running north and south, thus freely admitting sunshine; it is, moreover, in such position that it may be readily faced with glaced and light colored material, and generally presents a very convenient and serviceable arrangement.

The criticism upon this plan would be that if tall buildings exist on the south of it, the alley, even when widened, will not be wide enough to give perfect light to the south offices in the first five or six stories. This is a very grave objection, which would also be accented by the fact that so large a per cent of the offices have an alley frontage, which is nearly always objectionable.

Suppose, therefore, we take the offices which lie immediately south of the court and remove them to the north of the court, thus making the plan C. Here, as you see, the court is open to the south toward the alley, and has the great advantage of the long north and south axis, which is 26 feet longer than the length of court in plan B. In this case scarcely an office is solely dependent upon the alley for light; nearly everyone faces the principal streets, or, what has proven to be in Chicago quite as desirable, the open court. This court may be constructed as lightly as is consistent with strength; it may be faced with any brilliant reflecting material; possesses all the attractions of the inclosed court of plan B, and is superior for service. And although the net space included within the building seems somewhat less than in B it is considerably more available and therefore would produce considerably more revenue. Remember also that this slight percentage of net space in favor of B is apparent only, for in B there is somewhat larger proportion of walls which will more than counterbalance this difference. The general plan, marked C, is therefore taken.

The next general question is the number of stories. And in Chicago, at present, the difficulty is not to determine how few, but how many. Nothing to a stranger seems more irrational than the present rage in Chicago for high buildings; but the reasons for it are obvious and the fact apparently fairly well established, so that we must accept it. Let us assume that twelve stories are determined upon.

The next step to take is to approximate the cost of the building; a question of decidedly keen interest, and one in which it would not be generally conceded that the architect puts his best foot forward. Here experience has shown that the cost may be obtained within a very small fraction by ascertaining the gross cubic contents of the building from the bottom of the foundations to the top of the roof and inclusive, also, of all of the space inclosed within walls in the shape of areas, etc. Dependent upon the elaborateness of finish, the cost per cubic foot of such a building will vary from 25 to 40 cents, although in eastern cities the latter figure is often greatly exceeded. Thus, a building of this sort, containing 2,500,000 cubic feet, will cost, according to its elaboration, from $625,000 to $1,000,000, the average being about $750,000.

The general plan being now determined, and the question of cost discussed, we proceed to other points relating more in detail to the arrangement of the building, and which still have especially to do with the question of revenue

The following is a partial statement of these points:

1. *Height of stories.*—Ideally, the stories of such a building should be highest at the bottom, for here the light is least adequate. A system of graded heights, greatest at the ground and diminishing toward the top would be best. Motives of economy, however, tend to prevent this and the arrangement generally found most satisfactory is to have at the bottom a story level with the street and as high as consistent with easy access by stairs to a higher story immediately above it, thus obtaining revenue practically from two "first" stories. The third story is somewhat higher than those above, because it is apt, like the second, to be occupied by large corporations, or other tenants requiring considerable space in one room. Above this there is generally no cause for stories over eleven feet high.

2. *Main entrance.* — This is to be as wide and convenient as possible, leading in the most obvious way to the elevators and provided in a building of this size with at least four pairs of easily moving doors.

A very important feature of the entrance is the storm vestibule, which is always necessary and rarely adequately provided. These vestibules should be sufficiently deep to allow the two sets of storm doors to move freely past each other, with considerable space between. Immediately inside of this vestibule one or more wide flights of stairs lead to the second or banking story.

3. *Elevators.*—The number of elevators is very important, as are their size and shape. The number is proportionate to the cubic contents of the building, with an added percentage if the building be tall; for the length of time consumed by an elevator car in making a "round trip" depends as much on the number of stoppages for receiving and discharging passengers as on the speed with which it runs. In size the elevator car may not be much greater than 40 square feet, in any event, two smaller cars being better than one of larger size than this. The shape should be wide and shallow, with the door as wide as possible.

4. Ample space must be left for all forms of supply and waste pipes to run up through the building, as well as for the elevator cylinders, and for ventilation ducts. These shafts can scarcely be too large.

5. On each story convenient and accessible toilet rooms must be provided, and in two stories these rooms should have large ante-rooms with barber shops and attendants.

6. Heavy burglar and fireproof vaults will be needed in a few places, especially in the first and second stories, though, generally

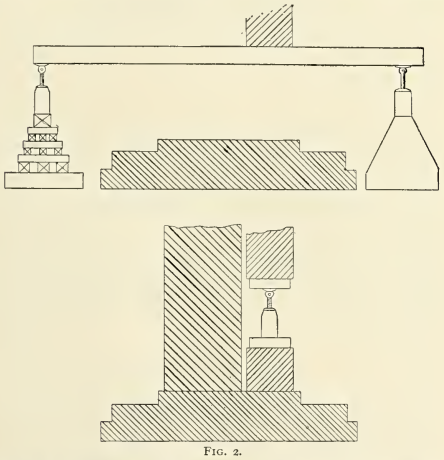


FIG. 2.

speaking, the building being non-combustible, vaults of hollow tile may be placed anywhere tenants may wish.

7. The utmost space possible must be obtained in the basement, not only for renting, but for boilers and all forms of machinery.

8. All plumbing and steam fixtures must be so placed that they are easily accessible, and at the same time do not deface the building. The same is true of all telephone and electric wires, all tubes for pneumatic service and discharge of letters.

9. The spacing of windows, and their size and height from the floor, are indicated to us with almost unavoidable exactness.

Think of the feelings of an Athenian architect of the time of Pericles, to whom the problem should have been presented to design

a building of fourteen stories, imposing upon him the following conditions: All of the stories except two to be 10 feet 6 inches high, all window sills to be exactly 2 feet from the floor, all lintels to be 6 inches from ceilings, and all windows to be in width not less than 4 and not more than 6 feet, and to be situated at distances apart of not more than 6 feet. If these conditions did not paralyze the architect, give him a few more: That all windows should have flat lintels, and that he must avoid as much as possible all projecting members on the façade, since these catch dirt and soot; and give him instructions to put on a few ten-story bay windows.

Yet these conditions are common enough now, if not in their entire number, certainly in the majority.

The next group of questions of vital importance relates to structure.

The building must be fireproof. Formerly a fireproof building meant one which was constructed with iron columns and beams, the beam spaces being filled with brick arches. The defect of this system lies in the fact that iron is not reliable in case of fire. At comparatively a low temperature it loses its carrying capacity and gives way; or else when very hot and suddenly chilled by water it is apt to break. The present fireproof structure is provided with metal columns and beams, all of which are inclosed in an envelope of hollow terra-cotta, which is securely fastened to the supporting metal. By this device heat is kept away from all metal work, and absolute safety secured. (Fig. 1.)

Steel columns are rapidly coming into use instead of cast iron, for the reason that iron presents many unreliable features in the difficulty of obtaining perfect castings, and of ascertaining certainly whether the casting is perfect or not. The steel columns are made of rolled plates of steel which are bent into proper form and riveted together. Thus they may be perfectly inspected and are absolutely trustworthy.

In the enormously tall buildings now erecting, scarcely any form of masonry is strong enough to use alone in the construction of the fronts; when, as noted above, windows must be placed at distances not much more than 12 feet apart, and should be at least 4 feet wide. This leaves a pier of not more than 8 feet at best, and this is often not strong enough to carry its loads without making it very thick, or by strengthening it with metal.

The first is costly, both in itself and because of the renting space it consumes. The second is entirely practicable and satisfactory. An iron or steel column is placed within the masonry pier, attached to it by anchors which do not interfere with any difference of expansion of the metal and masonry, and this column carries the loads of the various floors, the masonry being a mere fire and weather proof protection.

Another and still simpler method is to inclose the metal column in an envelope of hollow terra-cotta supported at each story on the column itself by brackets. In this case the column does all of the work. And any portion of the terra-cotta covering may be removed without injuring the structure.

Beneath all of these various supporting members foundations lie, which present some of the most interesting features of Chicago architecture or engineering.

The greater portion of the center of the city is built upon a bed of clay, more or less soft, the firmest part of which lies at an average depth of 12½ feet from the grades of streets. This clay, firmest at the top, is of varying depths, the upper part, called "hard pan," varying from 3½ to 7 feet thick; and borings through it to a depth of 75 feet often show no very great variation in the texture of clay beneath, although at greater depth there is more water, and therefore softer clay.

By tests made by the government, and also by individuals, this clay is found to be capable of carrying loads of not more than three and a half tons to each square foot. Practically this is greater than is safe, and the load generally assumed as conservative varies from one and a half to two tons, as greater loads per square foot create settlements so large as to be embarrassing.

Into this clay, every building built upon it settles to a greater or less degree. In several cases this settlement is considerably over a foot.

The general theory of foundation plan is to exactly proportion the area of each foundation pier to the amount resting upon it, keeping it free from every other foundation pier, so that the whole settlement will be equal, each pier being entirely independent. Thus a pier weighing, with the floors supported by it, 150 tons, should have a footing of 100 square feet, and one of 75 tons, footings of 50 square feet. Several very nice variations must be made from this general law, but this is the rule.

How best to construct this floating raft is the vital question. Formerly it was made in the shape of a pyramid of stone laid in cement, but this is costly, filling up the basement with its bulk and adding often twenty per cent to the gross weight of the whole pier.

The present method is to lay down upon the level clay a thin bed of cement upon which are placed steel rails or beams, spaced at closer or wider intervals, according to the weights to be carried and the length of the beams. The rails are then filled between and covered by cement, thus excluding air and water; another set of beams are laid upon them, somewhat less in area, and so on, the whole forming a solid mass of cement webbed with a mesh or grill of steel, giving it very great transverse as well as crushing strength. (Fig. 3.)

Such a foundation is made, covering areas of 20 feet square or more, the total height of which is not over 3 feet 6 inches, thus leaving the basement unobstructed. Under the old system of construction a stone pyramid 12 or 14 feet high would have been necessary properly to do the same work, and entirely filling not only the basement, but some of the first story also.

I have said that whatever construction of foundations be employed, some settlement of the building takes place. This creates several very delicate and interesting problems. It frequently happens that a very heavy building is to be erected by the side of another already completed. The new building will, of course, settle, and in doing so will work injury to the old one, cracking its walls, destroying the level of its floors, etc. Besides this, the old foundations are not large enough for the new and larger weights.

To overcome this difficulty arrangements are made to underpin the old wall, and support it temporarily with heavy timbers extending far enough east and west to span the width of the proposed new foundations. While the wall is thus supported the new foundations are put in place, and that portion of the new wall begun which is needed to make, with the old, a composite wall strong enough for all of the work. The old wall, up to this time carried on timbers, is not reconstructed for some time, but instead of the timbers originally used jack screws are substituted. (Fig. 2.)

As the new construction proceeds, the new wall, with its foundations, slowly settles, and to hold the old wall and the building to which it belongs in place, the jack screws supporting it are turned from time to time, becoming slightly lengthened, and thus keeping the former levels undisturbed. This will probably be necessary to continue for a year or more, as the new building will continue to settle for that time. When all settlement has ceased the jack screws are one by one removed, and the space occupied by them filled with brick.

This is simple enough; but sometimes it happens — in this case let us suppose that the old building adjacent to us is so occupied in the basement that we may not go into it without underpinning, and are thus prevented from using the above device. We cannot rebuild the foundations, yet we must not add to the load they carry. Here comes in one of the architect's best friends, the "cantilever."

Some distance from the old wall, columns are placed which are used as fulcrums of a lever. Farther away, on the long arm of the lever, another line of columns is placed, and against the old wall still another. Beneath these a foundation has been built, widest next the columns next the wall, and narrowest beneath the columns farthest

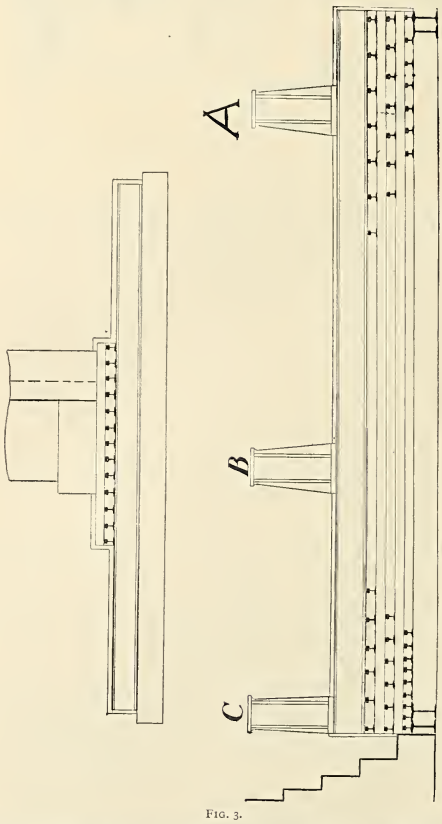



Fig. 3.

from it. The columns next the old wall will carry, on beams connecting them, whatever height of new wall we may require to be added to the old for the completion of our building. A very heavy girder runs beneath these three columns, and you will see by this diagram that if our calculations be correct, the column A will tend to settle most, the column C least, and the intermediate column B should settle exactly like all columns carrying simple and direct weights.

Thus we carry our own new wall from within, and in no way disturb the neighboring building. (Fig. 3.)

When the foundations are completely built, as I have indicated, large cast-iron shoes are put upon them to receive the base of the steel columns and distribute the loads carried by them over a larger area upon the footings (Fig. 4). When the steel columns have been placed upon these shoes, and the structure has reached the first floor, the steel or iron beams are all bolted to the columns through wrought-iron brackets, and each beam is bolted to the next, forming a perfectly rigid skeleton of metal.

To guard against all lateral movement from wind pressure or other causes, diagonal braces are carried along the tops of the beams between extreme points of the building, so as to tie the whole structure together like a truss. So strongly may this be done that a section of floor framing might almost be turned on edge and hold itself intact like a bridge truss.

Thus, this great iron skeleton is slowly articulated from story to story, and during this process the flesh and skin begin to grow upon it.

It will not do to wait till the roof framing is done before covering the anatomy of the building with its preclay, for here a nice point peculiar to our soil comes in.

The plans of our foundations have necessarily been made for the completed building, and at each stage of the construction the same relationship between the weights of each pier must be as nearly as possible maintained as will ultimately exist in the completed building; otherwise one part will settle lower than another, and needless strain be imposed upon the building. If the soft clay kept its original condition after the building were complete as it had before, the whole structure might resume its levels with completion, though, as just remarked, with considerable strain; but the clay is compressed by the loads placed upon them, and is drained of its water to some extent, thus becoming harder and capable of resisting greater pressure.

Those weights which are last placed upon it do not settle as much as those placed upon it in the beginning. The whole construction of the building should, therefore, develop together.

All that has been written relates to those portions of the building with which the public at large can have but little interest, but which is inner and significant principle about which every external aspect must arrange itself.

The truest and best forms which this external aspect is to present will be found by a reasonable appreciation of conditions of our civilization, of our social and business life and of our climatic conditions.

And even a slight appreciation of these would seem to make it evident to every thoughtful man in Chicago that all conditions, climatic, atmospheric, commercial and social, demand for this external aspect the simplest and most straightforward expression. Bearing in mind that our building is a business building, we must fully realize what this means. Bearing also in mind — though this, like the other conditions, is not likely to escape us — that dust and soot are the main ingredients of our native air, we must realize what this means. Both point the same way. Every material used to inclose the structure we have seen raised must be, first, of the most enduring kind, and, second, it must be wrought into the simplest forms.

These buildings, standing in the midst of hurrying, busy thousands of men, may not appeal to them through the more subtle means of architectural expression, for such an appeal would be unheeded; and the appeal which is constantly made to unheeding eyes loses in time its power to attract.

They inevitably become an integral part of the machinery of business, and may scarcely ever be fortunate enough to be thoughtfully and leisurely studied by the contemplative mind.

In them there should be carried out the ideas of modern business life, simplicity, stability, breadth, dignity. To lavish upon them profusion of delicate ornament is worse than useless, for this had better be preserved for the place and hour of contemplation and repose. Rather should they by their mass and proportion convey in some large elemental sense an idea of the great stable, conserving forces of modern civilization.

Enough has been said to suggest how radically new in type such edifices are, and to cause us to note how essential is the difference between the modern and any of the preceding recognized architectural types.

The cathedral of Cologne, in its structural development, is complete in itself. Its structure and art expression are one. So of the dome of St. Peter's or of any one of the great monuments of the world, except those of the Roman period. With the Romans, constructive methods as related to the ultimate completed building are suggested by those mentioned in this paper, for the Romans built of cheap material the framework of their temples, palaces and bridges, which was afterward covered and decorated with costly marbles and bronzes. Employing unskilled labor in the erection of the structure, and skilled labor only in its decoration, they were compelled to use vast masses of material, much more generally than would have been necessary for the same work than if scientifically employed.

But in modern instances, such as we have mentioned, the reverse is the case. The utmost economy of material is employed, not a useless pound being admissable.

In the Roman régime, one mind, the architect, must have foreseen the completed building and provided for all of its final adornment in each part of the structure. So with us. But it does not follow that in the most rigid adherence to scientific law we need to lose sight of the broad and artistic features through which our buildings may express themselves.

One result of methods such as I have indicated will be the resolution of our architectural designs into their essential elements. So vital has the underlying structure of these buildings become, that it must absolutely dictate the general departure of external forms; and so imperative are all the commercial and constructive demands, that all architectural detail employed in expressing them must become modified by them.

Under these conditions we are compelled to work definitely with definite aims, permeating ourselves with the full spirit of the age that we may give its architecture true art forms.

To other and older types of architecture these new problems are related as the poetry of Darwin's evolution is to other poetry.

They destroy indeed much of the most admirable and inspiring of architectural forms, but they create forms adapted to the expression

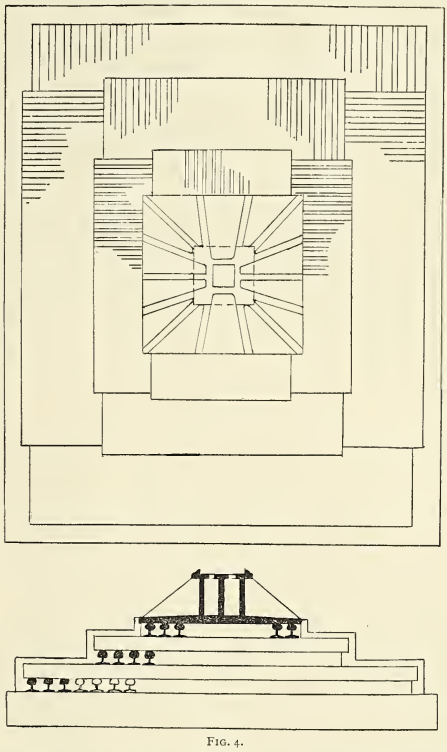


FIG. 4.

of new ideas and new aspects of life. Here, vagaries of fashion and temporary fancies should have no influence; here the arbitrary dicta of self-constituted architectural prophets should have no voice. Every one of these problems should be rationally worked out alone, and each should express the character and aims of the people about it.

I do not believe it is possible to exaggerate the importance of the influence which may be exerted for good or evil by these distinctively modern buildings. Hedged about as they are by so many unavoidable conditions, they become either gross and self-asserting shams, untrue both in the material realization of their aims, and in their art function as expressions of the deeper spirit of the age; or they are sincere, noble and enduring monuments to the broad and beneficent commerce of the age.

## A Sketch of Travel.*

BY IRVING K. POND, ARCHITECT.

MR. POND prefaced his remarks with some allusion to the organization of the club and the great advancement made in its scope and usefulness, after which he continued as follows:

In other papers before the club, if I remember rightly, I have sought, more or less, to instruct. In this I shall not try to be instructive. I am willing to "let the dead past bury its dead," so far as instructive papers are concerned, but I do wish to go to the past and rake up a few embers which have been smoldering for some time now under the ashes, and to fan them into a little flame. A hasty glimpse at the pages of my note-books, a lingering glance over the pages of my sketch-books, and the fluttering of the leaves is sufficient to fan into new life the slumbering recollections of a season of wandering in the architectural and artistic mazes of other lands. My awakened fancy will touch on other, as well as on artistic, themes,

*Read before the Chicago Architectural Sketch Club, Monday evening, May 19, 1890.

as my eyes and thoughts often did in that golden time of new sights and experiences—sights and experiences, perhaps, old enough to many another, yet so new to me.

As my memory is not dependent at all upon steamship sailings or railway time tables, I shall quickly and somewhat regardlessly turn to and from scenes of new life or of old life, scenes of new death or of old death, spectacles to amuse or to make sad; from snow and frost in Germany, and rain in France, maybe, to sunshine and blue sky in Italy; from sense to nonsense, maybe, a lapse which will be pardoned, I trust. It was in response to duty's call that I started on my journey. "Full of beauty, in the path of duty," says the song. I took it for granted there was to be pleasure in following in duty's wake; otherwise I had taken steerage passage. As it was, I went steerage one better, took second cabin, and the sooner to place my internal economy in harmony with the requirements of continental diet, took that second cabin in a German steamship. I enjoyed my first meal hugely, complimented Germany on the nice cargo of fresh Chicago meat she carried, on her Michigan apples and Florida oranges, and on her stability, for over the smooth waters of the bay she stood like a Rhine castle on a great rock (though, as I found out later, she contained neither baggage nor ballast!).

With the exception of the aforementioned articles of diet, I believe I was the only native-born American in the ship. I had a particularly wholesome feeling for the Chicago parties, when I learned that my neighbors all about me at table were from imported stock. I remember the incidents of that first day's ride very vividly — the tears at parting, the fading lines and colors of the great city, the fresh sea breeze, the fears of a new found German-American friend, that he would be arrested in the fatherland and be made to serve out his time in the army, which fears were realized, as I happen to know, much to his sorrow, as you happen to know if you happen to know anything about the discipline of the German army, and how irksome it must be to even an adopted American spirit. I remember the sinking land and the rapidly retiring sails which flapped above seaward-pointed prows. I remember it all till evening; then sleep came to put the varnish on the picture of that day's ride, one of the rarest of the pictures which hang in the salon of my memory. The picture which hangs next in chronological order is not so striking in composition nor so brilliant in color as some of the others are, but there is a mild charm to it. I had lost sight of the land I loved, and was not to see again for a year at least. A Switzer fellow, who had left his mountains but a few days before to live with a brother whose new home and interests lay beyond the Alleghanies, was one day nearer to the land of his heart, from which he had parted so short a time since, and as he supposed forever. Those mountains do pull at the heart strings of a patriotic Switzer. This one had reached New York, but it was not like home. Edelweiss bloomed, pictorially, in the dank beer tunnels, and not in the crisp air of his mountains. The timid chamois was there, not bounding from crag to crag, but killed, totally undone, and its tanned hide was being rubbed over the brass and crystal plate of an alderman's bar. That alderman, that leader of the people as he called him, that *representative* of the people, as we know him, was not much like William Tell. A medieval tyrant even were better, for he had *some* sense of honor and decency. So the poor Switzer fellow was returning, without even having seen his brother, and as the days shortened his heart grew lighter; as the days lengthened the land I loved was sinking deeper and deeper below the horizon. I do not care to say much about the other days of that ocean voyage. The wind came up and stayed, so did my dinner. The deck came up and didn't stay. I was with the deck, although I seemed to be in forty places all at once, as the bottom fell out and we dropped into the trough of the sea. * * * * *

After the second day I was happy, but once on board that ship, and that was when we sighted the green hills of old England, off Plymouth, and then night set in chill and rainy, and that, with distance, shut out from sight the patched quilt of landscape, with wooded spaces, tilled fields, grassy openings, sweeps of wavy grain, and green-capped chalk cliffs; and the next time I was happy was when I was in a clean French bed, with candle snuffed and curtain drawn and gentle sleep about to settle on my lids at 2:30 o'clock of a Sunday morning in Cherbourg. Because I skip that part, it does not signify that the encounter with the French customs officials, on the cold stone quay, in the drenching rain of dark, early morning, was without extreme interest or humorous situation as well—it was very funny! But other encounters of mine with customs officials have been more replete with dramatic incident and have more deeply touched my pocketbook. The quaint tavern which contained the bed which contained me during the few first hours of my wayward continental wandering is well worth describing to those who have not seen similar provincial hostelries, and I might say, under similar interesting conditions. I remember that I could hardly keep my eyes open from sleepiness as we rode in the little "bus" from the quay through narrow, dark streets, between high gabled houses, over rough and rattling cobble-stones, and finally under a low archway into the courtyard of the inn. Our hostess, with a bevy of neat, white-capped maids, awaited us with lighted candles in the little office, upon the stone pavement of which the rain was dripping. The courtyard was lower than the street; the office pave was lower than the courtyard, very evidently, for the water was flowing in streams into the house and it was too dark for us to see where it did manage to escape at last. I wondered why they kept so great a part of so small an office out of doors on rainy nights and thought to solve the problem, a sort of architectural problem, to be sure, to my entire satisfaction in the morning. But in the morning the aspect of things was changed, for the sun was shining brightly on the tile roofs about the court and upon the potted plants on the window ledges, and the swinging casements reflected in every direction the cheery welcome of the bright sunshine of our first, at least *my* first European day. The office seemed all right, perhaps a little damp, as if from recent contact with scrubbing brush and broom, for the little rivers had, in some subterranean way, "to the ocean run." In the courtyard I saw a soldier, and from then till when I took ship homeward bound I couldn't have slapped at a flea without hitting a soldier, not that all the fleas are on the soldiers, but there is a soldier for every breath a fellow draws over there. The steps of the winding stone stairway which led from my chamber to the ground were worn and slippery with age and feet, but they are good for a few centuries more. The breakfast in the sunlit café was fresh and sweet and blotted out the bitter memory of many an ocean steamship meal partaken of or passed by regretfully, anyway lostto me.

To those that love the sea a land journey seems tame, but to me the smooth swift ride by express from Cherbourg to Paris through the garden of Normandy was like the fragrance of a delicious dream, after my rude rocking in the arms of Neptune. Apple-trees were laden almost to breaking; even the props bent beneath the ripening fruit. Roses climbed over the hedges along the track, and covered the walls and roofs of the way-station houses. Peach, pear and apricot branches brushed the roof and sides of the coaches as we swept along through the orchards, and the guard must have received many a quick rap from the boughs as he passed along the foot board at the side to collect the tickets. It was one stretch of beautiful sunlit garden as far as the eye could reach, until we touched the skirts of Paris, and were soon lost in the ample folds. It was a quick transition from the half-timbered cottages with thatched roofs to the domes and mansards of the gay city; but we never minded the quickness of the transition, in spite of the beauty of the country, for our cry was, "on to Paris." I will not try to describe Paris. Better men have tried it and left but a vague impression. I imagine it would be like trying to describe a rainbow to a blind man. But Paris being France, it is easy to see how certain types of French life and certain modes of French thought, being brought to fuller and more perfect fruition in the intensified atmosphere of the capital, can here be tasted and enjoyed without one's having to go into an exhaustive study of the whole field. Some of these salient points I will try to touch upon. It did not take many hours' strolling along the boulevards, where one comes in contact with the entire scale of Parisian life, to fix one thing pretty strongly in my mind, and that was the absolute perfection of finish to everything to which the Frenchman applied his art, be that thing man, woman, child, painting, sculpture, building or pavement, even. We may not like the style, but we must say here is "style." Here is technical finish in the highest degree, controlled by a feeling for the beautiful and a knowledge of correct relationships. Take a Frenchwoman, for instance; catch her with a dark skirt and light stockings. You can't. Catch her with a straw bonnet and a fur shoulder cape. You can't. Not only you can't catch her, but she doesn't exist. From the toe of her boot to the tip of her glove finger, the Frenchwoman is perfect in dress, and in this implicit obedience to the laws of fitness she stands for her race in other matters.

You cannot stick a spade into the ground in Italy without unearthing a fragment of ancient art, a relic of a dead past. You can't lift your eye in France without beholding a finished piece of modern art, a vital factor of a living present! I made this discovery for myself (as others have made it for themselves) in the first few hours of my sojourn in Paris; and so you will not wonder that I did not lay out definite plans for a few days, but wandered in and out among the streets and buildings, putting to the test my newly formed theories and glorying in my newly acquired knowledge. It is a deep appreciation of man as an animal and a love for all sides of his character which led the builders of Paris to place buildings of all shades of feeling just where the passer-by could turn to them for relief. The Madeleine came to me like a cup of cold water, or rather I came to the Madeleine like a panting animal to a cooling stream, after a few hours of wandering and winding among the lighter phases of Paris life and art, and that church was the first public edifice I entered in that city.

I could never reconcile the Classical architecture of Munich to the surrounding art and life, but somehow that great, simple Greek façade never seemed an incongruous thing in Paris. It was like the serious shrug of a French comedian's shoulder, quite to be expected, and irresistibly fascinating. Perhaps I am prejudiced? Well, perhaps I am. I came into Munich out of Italy, in a snow storm, with nose nearly frozen, and fingers so stiff that I broke the mainspring when I went to wind my watch. All that did not seem to me to be quite consistent with bare heads and legs and floating togas! A German watchmaker mended that spring, but either the spring had contracted a cold, or the cold had contracted the spring, for the watch would not, after that, run for twenty-four hours without two windings. In my sketch-book I came across some hasty memoranda of a peculiar feature of French life, namely, the sidewalk cafés. Now this is the difference between American and French streets. In the American streets you are apt to be crowded to the gutter by the piles of goods laid out on the sidewalk for sale and display, piles which are always surrounded by an eager crowd of bargain seekers, each one striving to save that cent, as if it were one hundred dollars. In Paris, the chairs and tables of the open-air cafés blockade the walks, and at certain hours are filled with gay and festive lunchers, who talk over affairs of business or of pleasure, of politics or of society, and the man who happens to be passing just then without appetite for food or for affairs is forced to balance along the curb or walk in the gutter.

During my first visit to Paris the French salon was open. This was not the great salon which opens in May, but was an exhibition confined exclusively to French art in painting, sculpture and architecture. The architectural display was noticeable rather for the delicacy and finish of the drawings than for any especially bold features

of design. I would like to transport that phase of the French architectural art to America. It might not thrive here, for we seem to have little in common with the feeling that beauty should be a higher ideal than bigness, nor do we seem to appreciate that boldness is oftimes brazen effrontery.

The opening of the great salon is in May, and is the social and artistic event of all Paris. Have you seen a penniless boy hanging wistfully about a show tent? That was I and the salon, metaphorically speaking. I had money enough, but I had no ticket, and as the tickets that day, that great varnishing day, were gifts, and as nobody had offered me one and I was too modest to ask, I stood simply looking. As I stood thus simply looking, I was accosted by a rather dilapidated French gentleman with a hungry visage: "Would the monsieur like to visit the salon?" Ye gods! was this a French angel in disguise? I feared so, and hastened to clamp the bargain before it could get away. "You bet!" (Not strictly that, for we were conversing in the French gentleman's own tongue, but it will serve to show my state of mind.) "Certainly, it would be the greatest happiness of my life." "I have a ticket." "How much? *Wie viel? Quanto costa? Combien?*" (at last!) "Five francs." I fairly jumped, I would have given twenty, but I restrained myself, paid five and passed in with all the grandees of Paris and the visiting world. My experience goes to show that that is the reward which always comes to modest waiting. I would have given another five francs to have known what I know now, that I was in the same room with Marie Bashkirtseff and her paintings. I saw no paintings that day. My head ached so that I had to leave the galleries when, after four hours' counting, I had reached only 15,000 new, beautiful, individual spring toilets on as many vivacious women, and had not seen them all.

It is a night's ride from Paris to Switzerland. I took that ride before I had seen Paris to my entire satisfaction, because I heard that heavy snows were falling in the passes early in the season, and I did not care to come into personal contact with an avalanche. However, early as I did go I had an experience. I had intended taking a *voiture* (a light wagon) over the "tete noir," but the guides declared the roads impassable to vehicles, and I was advised to desist. I didn't want to desist. That wasn't what I went to Switzerland to do. I could have desisted anywhere, in America, for instance, if I had cared to.

So the good people of the tavern in Mortigny furnished me with a guide and a horse. We started just after breakfast. I was full size, but the horse was evidently laid out by mistake to a half-inch scale, and I winded him within the first half mile. However, he stood me in good stead, though I went on foot the remainder of the journey, which was some fifteen miles in all, and six of them up hill, for I strapped my traps to the saddle, and when we came to a particularly wet space I used him for a ferry. We climbed up for hours with eyes nearly blinded by the sunshine on the fresh snow. We would turn now and then to look back on the little tavern below us, almost straight down, at first only a few feet and then a good many hundred, for the tete noir is one of the highest passes of the Alps. At last we reached the little hut which crowns the summit of the pass, and stopped on the rude bench to rest our tired limbs. I ordered 2 cents worth of wine for myself, and brandy for my guide. As I took the glass the wrinkled old hag who kept the hut said with a cracked smile, which might have been sunshine in other days, "*Le Monsieur, a du bon courage!*" At first I thought she referred to the wine, and I eyed the glass suspiciously as I took a sip. It was all right. So I ordered 2 cents worth more. Of course, she referred to my courage in attempting the pass after the hard storm of the previous night, which had indeed blotted out every sign of the path in many a ticklish place, and must have skimmed over many a dangerous crevasse. And then there was the added danger of snow slides. I disclaimed any especial courage, told her it was one of my customary constitutionals, and went on my way rejoicing. On the down side of the summit we encountered a storm of snow. We didn't encounter much of it, for it was leaving the valley just below us; but we saw it raging there, and were relieved to see it sweep around a mountain and out of sight. We stopped at a more pretentious hut for late dinner, and here there was a weak conspiracy to detain us for the night — bad roads, danger, etc. My guide was weakening. Two more brandies for him and we started. There is no especial need of detailing the events of the day. We lost our way, came back a mile to regain it, but from that on Mont Blanc was ever before us, and all we had to do was to keep right on stumbling and slipping and ferrying and fording and sliding down into the valley, where long after dark we saw the lights of Chamounix.

I was pleased to see the lights of Chamounix. I was pleased to find other travelers in the inn. After a hot supper by the side of a big, blazing fire, I went to bed. I was too tired to have any care for damp sheets. In fact, I never thought about sheets till morning when I found I was frozen in between those on my bed. I called for help and a hatchet, and by noon I was dressed and down stairs. From where I lay in my bed of ice I could look up the whole side of Mount Blanc from bottom to top, and the sight was glorious. I had the pleasurable sensation of being an integral part of one of the biggest things on earth. The sunshine which illumed that grand old crown was the same that flooded my bed chamber. The ice which glistened on that great bald pate descended in sheets, and restrained, gently but firmly, my corporeal being, while my spirit could soar at will, and my voice could demand freedom. My voice prevailed, and with a hatchet I cut Mount Blanc off from me, and the great white mountain stands there sadly today a maimed thing, while *I* am as whole and as happy as ever.

The sunny plains of the South of France offer such great contrast to the ice fields of Switzerland that I will speak of them here. Cæsar went into Switzerland by way of the Rhone Valley. I came out of Switzerland by way of the Rhone Valley. Curiously enough I did not see Cæsar. However, the discrepancy of a few centuries of time may account for that. They were building a great cathedral at Lyons. They evidently imported the building sand in barges. I used, while in the city, to go down to the quay to watch the man unloading the barges, because of my interest in the man and in his manner of unloading. There may have been more than one man. However, the one I saw used to go down into the hold with an empty sack of gun cloth, and in the course of time would reappear up the ladder of the companion-way with the sack full of sand on his shoulder. From the deck of the barge he would climb up onto the quay, dump the sand out of the bag, and after a breath of fresh air would climb down into the hold again to repeat the operation. Was it slow? But there is no finer building done in France than in Lyons, and there is no finer building done in the world than in France. In Paris an equally novel sight struck me. It was where excavations had been made for foundations for the great new postoffice building. The water was removed from the trenches by men standing in line and leisurely passing back and forth pails empty and full. Slow? Well, yes. And the concrete, in pails, was passed along the same way and dropped into the trenches from on high at the rate of about a quart a minute. Slow? Well, rather. Yet more fine buildings have been erected in Paris than anywhere else in France, and more fine buildings have been erected in France than in any other country of the modern world. Is there any lesson to be learned from it by us? May it not be the fable of the "Tortoise and the Hare" unrevised? I am not reading an instructive paper; I only ask.

Down on the sandy plains of southern France there is a grazing district rich in nourishment to an extent hardly conceivable to one who takes but a superficial glance. Over these plains the shepherd goes on short stilts strapped to his legs below the knee joint. This is made necessary by the burning sands. The flocks and herds are attended by brave shepherd dogs, intelligent almost to the verge of being human. The hot sun and burning sands make these dogs wear numerous short *pants*. Now I will state a fact. I saw in this region cattle clothed "fore and aft," but more particularly "fore," in loose-fitting, baggy trousers; why, I was never able to determine, as no one I could ask about it seemed to know. I have a theory; it is my own, but it may not be correct for all that. I took my clue from certain strong-minded women who think to inspire respect by aping male attire. Now it may be that the owners of these cows, ignorant or unappreciative of the gentle instincts of the shepherd dogs, thought to inspire greater respect in them for the cows by giving to the latter by artifice what the former had by nature. This is *my* theory; it may not be correct. Speaking of attire, I may say here that in the provincial towns of southern France are to be seen some of the quaintest and most picturesque styles in dress which are worn by women today. The women of Arles are especially tasty in their dress, which avoids all hint of the grotesque so often found in the peasant garb.

From these grazing grounds it is so near to Spain that we will just step over the Pyrenees for a few moments and pick up a few bits of life there. One cannot go very far into Spain today without seeing a very quiet, dignified and altogether interesting figure standing demurely, yet with a not entirely concealed alertness, at some point of vantage, and not more than fifty yards away, nor less than twenty-five, perhaps, you will see his shadow. The man is of medium size, compactly built, with smooth face but for his rather heavy mustache, and always clean shaven. He is dressed in a perfect fitting suit of black — knee-breeches and leggings, a black mantle reaching to his knees and a black cocked hat. At his foot rests the butt of a repeating rifle, and up under his cape his hands clasp the barrel. I didn't see him when I entered Spain, for it was a dark, rainy night, and I spent all my time outside the customs house looking for a stolen umbrella — stolen from me — I had paid 35 francs for it in Paris, and it was so beautiful I never opened it when it rained, but the rain always made me think of it. Well, never mind about the umbrella. If I did not behold the gentleman in black till the next morning, it is not because he was not where he should have been. That is just where he always is to be found. So you know he was not a policeman. He is a member of the civil guard, and if I had known his duties and position in society I would not have traveled for some little time through out of the way parts of the Spanish territory wondering why the train or coach was not waylaid and all the passengers, my own precious self among the number, robbed. The civil guard makes Spain habitable today. His authority transcends that of the policeman or of the police magistrate. He comprehends the functions of the police, the magistrate, and the executioner almost. His authority is seldom called into exercise, but when it is, it is final. So highly is this authority respected that if the police were beleaguered by a mob while attempting to arrest a ringleader, the appearance on the scene of one of the civil guardsman and his shadow at a little distance always would conduce to absolute peace and quiet; and if the civil guardsman were to order the offender to accompany the police officer to the station the order would be complied with quietly and immediately. The order would be delivered in a low, dignified, conversational tone. The weapon of the civil guard is seldom raised, but a slight inclination to restlessness or resistance on the part of the offender would immediately bring the gun to the shoulder and the muzzle against the offender's heart. If the guard were to fire he could not be reached by process of civil or military law. Only through his superiors is he responsible to the state. You will see the reason for this shadow, as I have called him. He really is the same as his fellow; the one is the shadow of the other. They never come together, and consequently if one were to be surprised the other would be able to render necessary assistance. Nobody wants to attack a civil guardsman, for he is certain that an

unnatural movement in the direction of one will bring the gun of the other to bear on him. A snap of a guardsman's trigger means death to the man in front.

Looking at the police of our American cities, one would be apt to say that there is a very risky conferment of arbitrary power in such a system. But when you know the personnel of the guard and its history you can readily see how what is not safe here could be the best thing there. These guardsmen are chosen from the very flower of the best families. They are bound by oath to do their whole duty to society and the state. Their highest pride is in the fact that they are gentlemen in the truest sense of the term. Every harsh tone is polished out of their speech, every rough action out of their demeanor. When one enters a railway coach he recognizes politely every occupant, touching his hat, I believe, to ladies, but doffing it to no one. Answering in dignified manner and polite terms all direct questions, but otherwise never to be drawn into general conversation, he always brings a touch of gentle favor, and is a decidedly welcome coöccupant of a railway compartment. I would like to tell more of him, for in all my wanderings I came upon no one to whom I was more kindly drawn.

There is another class of Spaniards, the members of which are more widely known than the civil guardsmen are. These are the bull fighters. I have seen stories about them and long illustrated articles about them in our refined and popular magazines, but from these sources I have never drawn a word about the civil guard. Perhaps the American public is like the Spanish populace, to whom the bull fighters are heroes—little gods. I understand it in Spain; I don't understand it in America.

As soon as one is fairly across the Pyrenees he begins to encounter traces of the Moorish and Arabian civilization in Spain. As he journeys southward the traces become clearer and outcropping fragments more attractive, until he comes at last on the full noontide of the Alhambra. It was the beauty of this building that induced me to go over into Africa and encamp for a time within the borders of Morocco and study the descendants of the builders of this enchanting pile. It doesn't harm one to come closely into contact with people of other races and nationalities concerning some of whom he has held, perhaps, belittling ideas. It makes us think none the less of our own people, but it makes us think better of the rest of mankind. I dare say a Chicagoan would meet with more respectful treatment in the byways of Tangiers than a Moor would meet with in the streets of Chicago. The why and wherefore I cannot stop to discuss, though it would be an interesting question.

An interesting sight up out of Granada and near to the Alhambra (to make another and somewhat abrupt transition) brought to my mind the funeral procession of Chicago, with the mental remark that the spirit in these matters is much the same the world over. We don't like to have death intrude itself on life, and so we banish funeral processions from the parks, boulevards and residence streets. Now, there is nothing so much out of the way in this if other streets are readily accessible. In Granada, instead of letting the bier, with its supporters and followers go along the broad beautiful avenue which winds up past the Alhambra to the cemetery beyond, the funeral band is forced to go up a steep, tortuous path in a narrow valley between the Alhambra and the Generalife. As is customary in those southern countries, the family and friends do not follow the body to the grave. Hired mourners do the wailing; perverse and stony-hearted little boys carry the dripping lighted candles, or lay them aside long enough to sling rocks at the cover of the bier which another little boy has set up against a bank of earth while he rests his aching arms. Of course, this is not a necessary incident, this throwing of stones by bad little boys, of every funeral occasion; but I witnessed it, not at all to my amusement, for I had looked upon the face of the corpse. I don't care much for corpses as a general thing, but I would as soon not forget that face. It was of a beautiful girl of twelve or thereabout. The bier passed me in the narrow way, and I could not help but see it. Pure, delicately chiseled features, long dark eyelashes, a lovely sad smile, a thin white vail falling from the wreath of flowers about the hair. Such beauty, such purity, such a loveliness—and such coarse heartless surroundings. Just to think of the father and mother at home, and that girl there! I bowed my head and followed, that one reverent heart at least might accompany her on her last way.

One of the most touching of the many old customs I saw enacted in the Catholic countries was the uncovering of all heads, the bending of all knees and the crossing of all hearts as the priest and his attendants, with canopy and surging censers, strode solemnly through the busy street to some distant death-bed to administer the rites of the last communion. No matter how busy a man might be, down he dropped upon his knees till the priest had passed. I say this is touching; but when this action is followed by that last described, I feel that, perhaps, after all, it is rather for the priest or for the rites of the church, than any real feeling for the suffering body, or any real care for the soul about to take its flight. But whatever inspires it I shall not quarrel with it, for any demonstration of genuine feeling is all too rare nowadays, and in many participants the feeling must be genuine.

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AT this season of the year, a word of advice to those contemplating painting may not be out of place. Within the past few years there has been so much attention given to the tasteful architecture in moderate cost dwellings, that the selection of appropriate shades for decorative painting has come to be a more important question than at any previous period, and the richest shades, if selected with taste, may be used to the greatest advantage. We caution the uninitiated, however, against attempting to choose combinations of deep, rich colors, without first consulting a competent architect or some reliable paint manufacturer.

## An Expert's Report on a Strain Calculation.

THE necessity for architects understanding the principles of construction and the calculations of strains is well exemplified by the following facts, which are absolutely true.

A young architect was desired by an owner to prepare plans for a warehouse competent to safely carry 250 pounds per square foot of floor. After the drawings were made and the building was about to be commenced, the owner conceived the idea that the strength of the building was insufficient for his purposes, and employed an expert to examine the drawings and report thereon with regard to the strength. The following was the report:

The upper floor joists would carry 117 pounds per square foot.
The first floor joists would carry 140 pounds per square foot.
All girders throughout would carry 70 pounds per square foot.
The upper columns would carry 133 pounds per square foot.
The first story columns would carry 250 pounds per square foot.
The basement columns would carry 250 pounds per square foot.

The foregoing weights, in every case, are per square foot of floor with a factor of safety of five, that is breaking weights are divided by five.

It will be see that the only portions of the building that complied with the given conditions were the columns in the basement and those in the first story; while the girders were not much more than one-quarter the strength required.

There are many buildings put up which are, to some extent, in the same condition as the one under consideration.

The strength of a structure is the strength of the weakest part. It is useless to waste money in making strong columns or strong joists when the girders will not sustain the load that may be put upon them.

It may be that the publication of such facts as these will induce the architects, and young architects especially, to study up such questions.

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## Texas State Association of Architects.

THE fifth annual meeting of the Texas State Association of Architects was held in Dallas, on May 13 and 14. The following officers were elected:

President, James Wahrenberger, San Antonio; first vice-president, Nathaniel Tobey, Dallas; second vice-president, George E. Dickey, Houston; treasurer, G. M. Tozer, Dallas; secretary, George W. Stewart, Dallas.

Executive committee, J. J. Kane, Fort Worth; S. B. Haggart, Fort Worth; M. McQuirk, Dallas; W. W. Larmour, Waco; J. Larmour, Austin.

The following address was delivered by the president, James Wahrenberger:

PRESIDENT'S ADDRESS.

GENTLEMEN OF THE TEXAS STATE ASSOCIATION OF ARCHITECTS,—Before proceeding with the regular order of business permit me to address a few remarks to you, gentlemen, here assembled as representatives of an important and noble profession. I feel confident that our actions and deliberations will be of such a dignified and harmonious character as becomes the nature of our occupation, and that the best motives, kind feelings, and a spirit of true fellowship will govern us in all our discussions, for the benefit of our association, and of the profession in the state. And after completing our labors may we all return to our homes with many pleasant recollections of this, our annual convention.

Important questions may be brought before us for consideration and discussion, upon which depend to a great degree the future standing and welfare of our profession, and let no member of this association hesitate to express his views fully and without reserve upon all points in this connection, as the interchange of ideas and personal experience can only be of great benefit in devising measures to be taken for the future welfare of the profession.

I desire, furthermore, to impress upon your minds the fact that it is of the utmost importance that more attention be paid to the affairs of the association by its members, and that its meetings be better attended than heretofore. In a comparatively new field where the nature of our occupation is not fully understood, and the labors of a professional man are to be peddled like a lot of merchandise, concerted action on the part of educated professionals becomes imperatively necessary. The practice of ignorant and unscrupulous pretenders must be met with united, intelligent and persistent efforts of a thoroughly organized association, to place the profession before the general public in the dignified standing to which it is justly entitled. It becomes the architect to stand before the public as a man, educated to follow a profession which makes demands for talent and attainments second to none in existence; for, while it is necessary that we acquire a thorough knowledge of the principles of construction, and keep abreast of the times with reference to all new improvements made in the mechanical branches connected with the profession, there are also those esthetical studies connected with the builder's art that require much time and application in order to become proficient, and to keep up with the spirit of the times.

If the practice of architecture were simply to supply the ordinary wants and comforts of man, without cultivating the mind for an artistic taste, the same would cease to rank with the fine arts, and descend to the level of an ordinary trade. Besides providing for the physical wants and comforts of our fellow beings, it is for us also to satisfy those desires of a refined intellect, that move beyond the materialistic wants of every-day life. Not to forget, however, that the laws of esthetics are taught us in the works of nature, and the effect of beauty can, therefore, in no manner be that of shallow sensualism, but that of a true moral spirit. We can never obtain the desired effect upon the beholder, unless the entire composition of our work, together with all its details, be so treated as to express a certain deep and earnest signification in the outward appearance of the design, as well as in its interior decorations and arrangements. By imprinting upon our work the prevailing ideas of intellectual taste, we create and further develop the peculiar styles that characterize the spirit of the age.

Monuments left by past generations teach us the history of the people gone before us, and mark their progress in culture and refinement; they give us an insight to their religious views, and to the peculiar habits and customs existing in their times. The history of architecture as a fine art begins with the temple, the house of God, which, in its various forms and details, has furnished ideas that have led to further developments for the adornment of public buildings, and the decorative features of our homes.

In order to acquire a proper knowledge of the various architectural styles, and a correct understanding of the many different forms therein employed at various times, the reason of their origin, and their purpose, we must trace back the history of architecture, and become acquainted with the prevailing ideas and views of the people in this connection, that have led the old masters to the development of these peculiar forms and compositions. As we do this, we find that in many cases one style has served as a basis for the gradual development of another, and as the peculiar ideas of taste, and of the grand and beautiful, become more developed in certain directions we are able to follow up the progress of the various architectural styles from their origin to their highest state of

perfection. Those of the profession who are so fortunate as to enjoy travels in older countries abroad, to view the monuments left by the old masters, at different periods of history, and also the grand works of modern times, derive the greatest benefit and the most valuable assistance in their studies of this kind. That the same are of great importance no educated architect will deny; they are essential to the designer in order to fulfill the first requirement of a design properly executed, which is, that a building as a mass shall, at a glance, impress the mind of the beholder with its importance, and disclose to him the purposes for which it was erected.

It has always appeared to me absurd that public buildings like court houses, postoffices, etc., at this age of steam cars and electricity, should be of such antique architectural styles as to remind us of the dark days of the inquisition, and of the carrier pigeon. Of that hideous nightmare, the so-called modern Queen Anne residence, perhaps the least said the better. And perhaps, also, of the peculiar misapplication of the misunderstood Byzantine and Moresque forms, in which some of the younger brethren of the profession seem to take a special delight to show their ignorance in architectural style and esthetics, and which to a great degree may account for the depraved taste displayed in much of our modern architecture.

The arts of painting and sculpture are closely allied with that of architecture, and have at all times lent a helping hand in embellishing and decorating important works. It is therefore required of the educated architect to show good judgment and taste in employing the assistance of these kindred arts. They have been developed hand in hand with that of architecture. Mark the difference in the manner of employing them at different periods of history, in connection with the architectural styles then in vogue, and compare the severe, stiff, cold lines and coloring of the earlier days with the graceful forms and beauties in the works of the Renaissance.

By reason of the amount of study to become well skilled in these beautiful and important branches of our profession, the practice of architecture should be entitled to stand as one of the most prominent practiced among the cultured and refined classes. That the educated architect does not yet fully receive the encouragement, through a proper appreciation on the part of the general public, which his profession entitles him to and which he enjoys in older countries where the profession and its requirements are better understood, is a fact of which we have almost daily demonstrations in our practice. However, of late years, we may note a marked improvement in this respect, with the wonderful growth of our country. The temporary log cabin of the hardy pioneer will soon exist only in the recollection of a few, and the time of the weather-boarded corner grocery and dry goods establishment, with a stock of patent medicines and the United States postoffice combined, is quickly passing by. The character of our public buildings is undergoing a marked change, and the importance of the profession is steadily increasing until it will eventually arrive at that high plane of excellence to which it rightfully belongs.

In the meantime, let us strive to establish those proper and correct relations which should exist between the honorable educated architect and his clients; we will thereby gain the confidence of the public that is necessary for the attainment of our objects.

We have repeatedly and in vain petitioned for legislation to regulate the practice of our profession, and to protect us, as well as the general public, against the abuses and pernicious practices of uneducated and unscrupulous pretenders. While we should renew our efforts with increased energy and vigor, what the prospects for success will be in the near future remain yet to be seen. The average legislator is not given to much thought in matters of this kind, and as long as only questions of a political nature remain uppermost in his mind, an encouragement in the promotion of science and the arts cannot be looked for by any legislation in this direction, in the near future. And positions held under the government by professional men, chiefly obtained through party influence instead of ability and personal merit, will for some time still lack that moral influence and high honor due the profession.

However, it is for us not to become discouraged in our labors, but to renew the same with a determined resolution hand in hand with those of kindred associations, and with the fond hope that with the wonderful growth and increasing prosperity of this country, our unremitting efforts will be eventually crowned with success. In the meantime, let us meet in council and advise with each other, as to the proper steps to be taken toward the public, to overcome the evils born of unprofessional and unscrupulous methods, and present such professional facts, methods and ideas in a manner that the public mind must become educated to the importance of our occupation. We must form rules to guide us in our practice that will command the respect of our clients, with whom we have our daily business transactions, and the public at large will soon begin to appreciate our position. Let us, also, not hesitate to exclude from our ranks, and ignore the pretensions of those who are not fitted by education, or otherwise, to practice the profession; such who look upon the occupation simply as a milch cow, and especially those whose past career in the profession has been of a dishonorable character.

During the few years since the organization of our association much good has been accomplished; the interchange of ideas and personal experience has been of great benefit to all of us; we have become united in one common fellowship, and have learned to struggle, hand in hand, for one common cause. Our aims and objects are already beginning to be understood and appreciated by educated and well-thinking men. Let us remain united in our persistent efforts to ultimately attain the objects of our association, and aid in raising the profession to that high standing which it so fully deserves.

In conclusion, I take the liberty of stating to you, gentlemen, that my views in regard to architects' competitions, as now generally conducted, have not changed in the least since expressing them at our last meeting at Waco. I still believe that the more architects respond to the shallow inducements offered in advertisements for these sham competitions, the more difficult the task will become to raise the profession to the standard so much desired. Good professionals should discourage such competitions by paying no attention to them, and all competitions where awards are not made by juries of competent professional men, should be entirely ignored. The temptation, I admit, is sometimes great to convince an ignorant committee of the superiority of one's ideas, expressed in his plans and specifications, but we may only succeed in our aims by sacrifice commensurate with the results to be accomplished. The methods of proceeding in these unregulated competitions, controlled by persons totally disqualified, have led to much discussion and ill-will among our professional brethren, and it is necessary that we have the proper respect and friendship for each other, in order to secure the confidence and respect of the public, and to succeed in the task that our association has laid out before it.

The minutes of the remainder of the meeting were not received from the secretary before going to press.

## Association Notes.

### EDINBURGH ARCHITECTURAL ASSOCIATION.

On March 29 the Edinburgh Architectural Association visited Prestonpans, and, notwithstanding the somewhat unsettled condition of the weather, a large number of members were present.

The party was under the leadership of Mr. Blanc, who first introduced to them the interesting feudal tower of Preston, which was described as a work of early fifteenth century, comprising, in an area of about 34 feet by 28, a tall keep about 50 feet to the parapet, with a seventeenth century addition, increasing the height by 17 feet more. The original structure had been divided into four floors, with the usual appropriation of lord's hall, private apartments and accommodation for retainers and stores. In a wing projected from the west side of the keep an interesting and unique construction of dungeons was examined, as also the special features of construction for the defense of the main entrance exhibited on the outside elevations. Originally a possession of the Hamiltons, the tower has remained, with but short intervals, from the period of its erection with the family; and although much of the property originally attached to it has been disposed of, the tower itself, with the inclosure in which it stands, is now owned by General Sir William Hamilton, through whose kindness the party was allowed to view it. The tower seems to have been occupied up to 1663, when a fire, the third from which it had suffered, rendered it no longer habitable. It possesses a good deal of interesting detail, sufficient to have elicited the interest of antiquaries, by whom, a few years ago, a considerable sum was expended, under the direction of Mr. Blanc, in replacing a great deal of the carved stonework found among the ruins, and generally repairing the structure. The party next proceeded to Preston Cross, which was explained to be one of a type of market crosses erected in various towns in Scotland at the beginning of the seventeenth century. Its details were separately pointed out and examined, and after visiting the ruins of Preston House — the mansion of the Hamiltons after their occupancy of the Tower — and the old parish church of Preston, the party returned by Northfield House, the apartments of which the party, by the permission of the agents, Messrs Davidson & Syme, had an opportunity of examining. Points of interest were also brought under notice by the Rev. Mr. Mackay, of Prestonpans, who, in the absence through illness of Mr. Hislop, accompanied the party during their two hours' very enjoyable visit.

### ROCHESTER ARCHITECTURAL SKETCH CLUB.

In the recent competition for an entrance gateway first place was given to E. S. Gordon; second, William E. Madden; third, Miss Nellie E. Dutcher.




The first prize design is given above.

### CINCINNATI CHAPTER AMERICAN INSTITUTE OF ARCHITECTS.

The architects of Cincinnati met at 2 o'clock P.M. April 22, 1890, for the purpose of reorganizing the chapter in that city. Nine members were present.

President McLaughlin called the Cincinnati Chapter American Institute of Architects to order, and, upon motion of Mr. Rapp, all members of the Cincinnati Chapter Western Association of Architects were admitted to membership in the new chapter. This was done so as to merge the two societies into one. The meeting then adjourned for five minutes, and the Cincinnati Chapter Western Association of Architects was called to order, and, upon motion, adjourned sine die, thus consummating the consolidation of the two organizations into the Cincinnati Chapter of American Institute of Architects, which was again called to order and the following officers were elected to serve for the year beginning the third Thursday in April:

President, Samuel Hannaford; vice-president, George W. Rapp; secretary, Charles Crapsey; and treasurer, H. E. Siter.

Mr. Rapp moved that the old charter of the Cincinnati Chapter of the American Institute of Architects be found, and this motion was carried.

Upon motion a committee of two was appointed to look up quarters for the chapter and report at the next meeting. The chair appointed as such committee Messrs. Siter and Rapp.

Upon ballot the meetings were fixed for the third Thursday of each month, at 3 o'clock P.M. Matters of general interest to the profession were discussed, and upon motion the meeting adjourned.

### CHICAGO ARCHITECTURAL SKETCH CLUB.

The feature of the evening of the meeting, June 2, was a dissertation upon the practice of architecture by Architect D. H. Burnham. There was a full attendance of members present, and the perfect freedom given the members by the speaker to ask questions and make comments upon his deductions, made the occasion exceedingly interesting.

Without attempting to give Mr. Burnham's remarks or answers to questions in full, some of the points taken by the speaker will be read

with interest by the profession generally. The principal points in Mr. Burnham's remarks are as follows:

"You are Americans, and, therefore, hopeful of a successful life, and you look to me tonight for hints to help you. From the cradle you have heard that honesty, industry and attention to details will win. This is so, and the whole story. All three are necessary. About the two first there is no necessity to add anything, but about attention to details I am to speak now. An architect used to find little difficulty in designing pretty much everything needed by the people, from a court house to a cottage. He made some sketches which he called working drawings, and some notes which went under the name of specifications. There was not much competition in the trades. Bosses were capable mechanics and honest men, and would carry out the work intrusted to them with fidelity, no matter what the price. To lay out a plan and construct a building were the principal duties of an architect.

"Now, however, he is confronted with much more serious problems. Public taste has become trained and critical, and is constantly growing more so. The designer must now be very talented and thoroughly trained to obtain any permanent recognition.

"Business buildings are doubled and tripled in height, and are fireproof, where they were mostly low and combustible ten years ago. The constructor, therefore, must be a great engineer, wise, wary and of soundest judgment; for not only must he build safely, but not a pound of steel or a cubic foot of concrete or a brick too much can be tolerated. He must not only guarantee stability, but must produce it without the unnecessary waste of a single dollar. Economy is demanded by our keen, intelligent building public almost more rigorously than good plans or good art.

"Buildings are now supplied with complex heating, plumbing, sewerage, ventilation, elevators, pumps, tanks, engines, dynamos and electric lighting. Many have costly plants of all these kinds, none are without a part. The owners have a right to expect the very best of everything in every part, and perfect mechanical planning and application in each case. Therefore very expert mechanical and sanitary engineering are required to handle this part of the work.

"If many important works be on hand in an office at once, the mere handling of the business they produce requires much experience, and is enough to occupy the time of an able man.

"Passing over many other strong points that might be instanced, I have shown enough to prove that one man cannot himself attend to all the work of a modern city practice in America, and as we agree that 'attention to details' is necessary to success, it is plain that some method must be found to attain it, other than through a mixed practice by a single person *in the old way*.

"It is manifest that the successful practitioner of the future will be a specialist, or at the head of an organization of specialists. This is not an original statement on my part. It was made to the Illinois State Association of Architects some years ago in a letter written by Mr. Richard T. Crane, of Chicago, in response to a circular sent out by the association to prominent business men, asking for criticism on the then usual conduct of an architect's office.

"To design and construct a great office building, some stores and flats, some dwellings, some factories, a church, etc., in a manner to elicit praise from our critical building public, is beyond the powers of one man's brain and energy, if he attend to the details of all. If, therefore, a man or a firm is ambitious to carry on a great general practice, there must be in the organization:

"A very great designer.

"An exceptionally strong chief engineer.

"A sanitary engineer.

"A mechanical engineer.

"A business man.

"Each of these will have his hands full if he is faithful, and only with such an organization, I say again, can a large general practice live and keep going.

"But why look for a general practice when all conditions about us prove that specialists do better work, and in the long run get the greatest rewards. Medical practice has, of late years, gone into specialties, and its professors all say that never in its history has it advanced with such great rapidity, and never have the doctors been so superbly paid.

"Engineering is divided into specialties, and better construction in material and detail is the result, as everyone knows.

"Chemistry and mechanical engineering tell the same story. Specialists are the men who succeed and who are paid.

"In art the lesson is more plain still. The man who paints one thing is he who does it well, and who earns great fortune for now and undying fame for the future.

"Let one or more take up dwellings, others churches, others hotels, others business buildings. Let each aim to make the public say from San Francisco to New York, 'He is the master in that line, if you want the best, you *must* go to him'; and then, I ask, will there be any doubt about a great name for you, or a great fortune?"

These remarks were elaborated upon by the speaker and considerable discussion developed. The points raised by members were met with clear, forcible and analytical answers. As a result it will not be strange if the evening marks a turning point, to a greater or lesser extent, in the course of every draftsman present; seeming, as they did, to receive the remarks of the speaker not so much in the light of prophecy as the deductions of one who stood upon the heights of the profession with a mind trained to observe, and who clearly saw the tendency of the times.

It was evident that a large majority of those present were convinced of the truth of Mr. Burnham's remarks, and all were charmed by his clear, forceful arguments, and it was apparent that those who met the speaker for the first time carried away lasting impressions of his thorough friendliness, which pervaded the meeting. That Mr. Burnham that evening largely added to his friends among the draftsmen, was evidenced by the hearty vote of thanks presented at the close of the session.

In the competition for an artist's house by the sea, rendered in sepia, fourteen designs were received. The committee awarded first place to W. B. Mundie, second place to T. O. Fraenkel, and third place to C. Bryant Schaefer. The competition as a whole is the best of the year, both in execution and in number of drawings.

## Recent Legal Decisions.

PARTY WALLS.

In the absence of a special agreement or controlling custom providing otherwise, party walls must be capable of substantially similar use by each of the adjoining owners. Hamman *vs.* Jordan, Superior Court of New York City, 9 N. Y. Supp., 421.

TIME FOR FILING LIEN.

Where work under a building contract is abandoned by the contractor, either by the consent or through the fault of the owner, the building will be deemed completed so far as its relations to contractor's lien is concerned. Shaw *vs.* Stewart, Supreme Court of Kansas, 23 Pac. Rep., 616.

JUDGMENT ON MECHANIC'S LIEN UNDER INVALID STATUTE.

The mechanic's lien law of 1887 in Michigan having been declared unconstitutional, a judgment rendered under it cannot be sustained so far as it applies to the enforcement of the lien, but where it also provides for a personal judgment, that will be enforced. Koepke *vs.* Dyer, Supreme Court of Michigan, 45 N. W. Rep., 142.

ARBITRATION.

Under a provision in a building contract whereby the difference between the parties as to the value of extra work shall be submitted to arbitrators; and if another party has sought to avail himself of the privilege to submit the controversy to arbitration, the defendant cannot urge such clause in the contract as a bar to an action to recover for such extra work. Williams *vs.* Shields, Common Pleas of New York City and county, general term, 9 N. Y. Supp., 502.

MEMORANDA ON PLANS AS EVIDENCE.

In a suit for the price of wall paper furnished in accordance with a plan of the house for which it was to be used, left with plaintiffs by defendant, where the question arises whether plaintiffs sent more paper than was ordered, the fact that the amount needed was marked on the plan does not prevent plaintiffs from proving by other evidence than the plan that the amount furnished had been ordered. Platt *vs.* Hubinger, Supreme Court of Errors of Connecticut, 19 At. Rep., 527.

## Our Illustrations.

Design for City House, Loring & Phipps, architects, Boston.

Sketch from St. Contest, France, by John F. Jackson, Buffalo.

Old National Bank Building, Fort Wayne, Indiana. B. S. Tolan, architect.

House of Mr. D. Pleyte, Denver, Colorado. Varian & Sterner, architects.

Block of residences for Mr. H. R. Wilson, Chicago. H. R. Wilson, architect.

Sketches of house for Mr. William H. Rideing, Jamaica Plain, Massachusetts. Sanford Phipps, architect, Boston.

Sketch,

"There are seven pillars of gothic mold,
In Chillon's dungeons, deep and old."

—E. D. Martin, Chicago, del.

Accepted competitive design for a bronze statue to crown the Indiana Soldiers' and Sailors' monument at Indianapolis. George F. Brewster, Cleveland, Ohio, sculptor. The height of the statue is 22 feet; the pedestal, including the globe, is 8 feet; the torch is 8 feet above the head, making a total of 38 feet. The contract calls for its completion by June 1, 1891.

The new Carew office building, Cincinnati, Ohio. James W. McLaughlin, architect. The building is being erected upon the most prominent corner in the city, facing the fountain and esplanade, the lot formerly belonging to the Este estate, and has long been known as the "nasty corner." It fronts 100 feet on Vine street and 85 feet on Fifth street. Although but eight stories high, it will be 132 feet to the top of the parapet, and 180 feet to the summit of tower. The first two stories of iron and granite, and the remainder of front of red sandstone; cost about $200,000.

PHOTOGRAVURE PLATES.

*(Issued only to subscribers for the Photogravure edition.)*

Residence of Mr. F. A. Macomber; architect unknown.

Residence of Mr. J. W. Gillis, Rochester, N. Y.; architect unknown.

The Stein Manufacturing block, Rochester, N. Y.; Chas. S. Ellis, architect.

Stable for Mr. William Hamlin, Buffalo, N. Y.; Marling & Burdette, architects.

View of residence of Mr. William Hamlin, Buffalo, N. Y.; Marling & Burdette, architects.

View of residence of Mr. William Hamlin, Buffalo, N. Y.; Marling & Burdette, architects.

The Genesee Valley Club House, Rochester, N. Y.; Du Fais & Canfield, architects, New York.

## Mosaics.

ARCHITECTS John M. Van Osdel & Co., of Chicago, have removed to the Temple Court Building on Dearborn street.

ARCHITECTS Patton & Fisher, of Chicago, have gone a story higher in the Montauk Block, and fitted up a model set of offices.

NEW ORLEANS is to have public baths, with accommodations for men and for women and children in separate buildings arranged on either side of the Sanitary Association's flushing pump, which raises water from the river for flushing gutters.

THE first fellowship in architecture of Columbia College has been awarded to Arthur A. Stoughton, of New York City. It amounts to $1,300, and the money is to be spent in travel and study abroad. Architects R. M. Hunt, C. F. McKim, T. Hastings and A. Rotch were the Awarding Committee.

THE Federal Court of Claims has finally dismissed, under the statute of limitations, the claim made by Alfred B. Mullett for compensation as architect of the building now occupied by the state, war and navy departments. A press report says that under ordinary circumstances the statute would have begun to run in 1875, when Mr. Mullett retired from service as architect of the treasury department, but that it was claimed, that, according to the custom of architects, the amount could not be computed until the work was finished, and this was not until 1888. The court, however, decided that the statute must be applied in the usual way, and referred to the Cologne Cathedral and the Washington Monument to illustrate the impracticability of making any different rule. The claim was for about $150,000.

## Building Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, ILL., June 10, 1890.

Commercial, manufacturing and investing interests generally are extremely anxious that the present favorable condition of things may continue throughout the year. The possibility of interruptions through some unannounced and unexpected agency is kept in mind. Overproduction is very carefully guarded against by the manufacturing interests. So far as the volume of business is concerned, no complaint can be made. The manufacturing capacity of the country is well taxed — so much so, indeed, that an increase of capacity is being made in almost every industry. There may be some exceptions to this rule, but it would be difficult to discover them. Building activity is being gradually resumed. According to the statements of the leaders of the striking carpenters, the eight-hour day has been secured this season to the carpenters in twenty-seven cities and towns, affecting 23,955 men in the trade. At present writing the men in nine cities are still out for the eight-hour day; six have compromised on nine hours. The nine-hour day has been established in seventy-two towns and cities. In all, the movement for shorter hours of labor has been successful, more or less, in 117 cities. The demand for building material of all kinds, but particularly iron, steel, lumber, shingles and lath and cement, and all interior finishing materials, has been very active during the spring, and production is still actively maintained, there being a feeling of confidence that summer and fall demand will compensate for the dullness of the past few weeks.

In financial circles money is abundant and loans are made, for the most part, at reasonable rates of interest. The country is deeply interested in the legislation aiming at increasing the supply of currency, and but little opposition is now being manifested by those who in years past regarded such measures as those now under consideration as not only exceedingly dangerous, but revolutionary. Opinions are changing among the money changers; they are recognizing the fact, long since recognized by simpler people, that an abundant currency is much less harmful than a restricted supply of money based purely on gold.

Business men in all sections of the country look forward to a summer and fall of exceeding activity. Railroad construction so far this year has been rather disappointing, but there is time enough yet to make up. The iron and steel mills throughout the country are crowded with work. The lumber interests are thriving. The coal miners are busy in nearly all sections, and the productive capacity of the country is more generally employed, and to a greater degree, than during last year. Stocks are low, prices are pretty well maintained, speculative movements are seldom attempted, and legitimate dealings, based upon actual requirements, are the rule. The present year promises to be the most prosperous one in American history.

## Synopsis of Building News.

**Buffalo, N. Y.**—Architects Johnson & Archer: For Mr. E. Webster, a brick and frame residence; cost $8,000. For H. L. Lymen, three brick residences; cost $12,000. Also for George P. Smith, of Tonawanda, N. Y., a brick and stone business block; cost $50,000.

**Chicago, Ill.**—The hope that two months ago was entertained by the carpenters' unions throughout the country, that the strike inaugurated at that time would result in the establishment of a recognized union of carpenters in this city, and give a strong impetus to similar movements in other cities, has disappeared before the strong and determined opposition of the Carpenters' and Builders' Association. Since our last report the situation has remained unchanged, except in the direction of the number of men employed by the members of the association and the new work begun in consequence. While before the strike it was estimated that nearly eight hundred carpenters were out of employment in the city, there have been over fifteen hundred applications for work at the association headquarters, and it is not known how many strangers have secured employment through the private advertisements of members upon the job. The result is, that while the demand for men is still good, as the contractors are commencing work that has been delayed by the strike, there is little difficulty in securing all the help necessary. This wholesale employment of presumably non-union men (though no distinction is generally made and no question except regarding proficiency is asked an applicant for work) has, of course, placed a large number of men out of work, most of them permanently, and for the past two weeks they have been desperate in their attempts to drive those willing to work from the buildings. Clubbing has been general, but with no fatalities, though in one case an old man was so badly clubbed and kicked as to make his recovery uncertain.

These outrages finally determined the Carpenters' and Builders' Association to seek protection from the law and the prosecution of all offenders. The mayor was seen and promised ample protection with the coöperation of the association. This promise has been kept as far as the political aspect of the case would allow, though in some sections the police have been active as possible and arrested offenders, in contrast with others, who would walk through a crowd of strikers and, with a wink at the leaders, disappear. The association, however, have kept detectives employed, and engaged the best legal talent, and for the past ten days there have been from one to six cases in the courts each day. The leaders are arrested on state warrants for intimidation and assault. Several have been fined, but the endeavor will be as far as possible to take the cases before the grand jury. At the present writing the more important trials have not been finished, as continuances have been granted. No arrests have, as yet, been made under the Merritt conspiracy law, though this may in the near future become a feature of this struggle for liberty now being so successfully carried on by the carpenter contractors of Chicago. It may be interesting to note that since the strike commenced, or rather since the dummy association was formed and "arbitrated" with by the union, that a total of nine out of the two hundred members of the association have signed the union agreement and thirty new members have been received. The vigor with which all strikers interfering with men at work are prosecuted has led to a material cessation of this form of lawlessness, and the result is a victory for right and freedom that will give Chicago building operations uninterrupted progress for years to come.

Architects R. T. Newberry & Co.: For Gen. W. C. Newberry, a five-story manufacturing building on Huron street, near Wells; pressed brick and stone; cost $20,000. For George F. Heimbrodt, a two-story flat building on Warren avenue, near Ashland; brownstone front. Also making plans for the Marquette (Mich.) Club House; two story and basement; frame; cost $5,000.

Architect C. S. Frost has planned four dwellings, to be built on Indiana avenue, near Twentieth street, for Marshall Field; pressed brick and stone; furnaces, etc.; cost $20,000. For George H. Bowen, a three-story residence at 3326 Prairie avenue; Bedford stone front; hot water heating, etc.; cost $25,000. For C. L. Hutchinson, trustee, three three-story residences on corner of Twenty-sixth street and Prairie avenue; Bedford stone fronts, hot water heating.

Architects Lamson & Newman: For Lamson, Newman & Bushnell, six two-story dwellings on southwest corner of Robey street and Jackson boulevard; St. Louis pressed brick and Bedford stone; plate and beveled glass, furnaces, etc.; cost $25,000. For M. O. Callaghan, two two-story flat buildings on Vincennes avenue, near Forty-third street; Bedford stone fronts, mantels, furnaces; cost $16,000.

Architect M. L. Beers is preparing plans for a two-story residence, corner of Jackson avenue and Fifty-sixth street, for William Sivyer; Bedford stone front, furnace, etc.; cost $6,000.

Architect George W. Maher is making plans for a two-story residence on Belmont avenue; boulders and shingles; hot water heating, etc.; cost $9,000.

Architect C. S. Corwin has planned a two-story residence, to be built at 1066 Warren avenue; Anderson Roman brick and stone front; furnace, etc.; cost $8,000.

Architect C. F. Sorenson is preparing plans for a seven-story hotel, 46 by 130 feet, to cost $50,000, to be built on Chicago avenue, near Townsend street, for O. H. Ahlgren; pressed brick, brownstone, and galvanized iron bays, electric light, elevator, steam heat, etc. For O. Oliverson, a two-story flat building on Leavitt street, near Ewing Place; St. Louis pressed brick and Connecticut brownstone.

Architect J. A. Thain: For Mrs. Henrietta H. Loveland, a three-story flat building, to be built at 2713 Indiana avenue; Bedford stone front, steam heat, etc.; cost $18,000.

Architect William Ohlhaber: For B. Foley, a two-story flat building, on Sheffield avenue near Center street; Anderson pressed brick and stone. Jor John Korazeck, a four-story store and flat building, on corner of Dixon and Blackhawk; cost $10,000; Anderson pressed brick and stone. For H. Lemke, a three-story and basement flat building, on Robey street, near Jane; St. Louis pressed brick and stone; cost $6,000. For H. Hansen, a two-story store and flat building, corner of Avondale avenue and Hammond street; frame. For John Muller, a two-story dwelling at Austin; frame, stone basement, bathroom, mantels, furnace, etc.

Architects Schaub & Berlin: For Mrs. J. A. Trask, a three-story flat building on Jay street, near Belden avenue; La Salle pressed brick and stone.

Architect F. L. Lively: For B. F. Jacobs, planning a frame railway station, to be built at Evergreen Park.

Architect C. H. McAfee: Planning a two-story and basement stable, to be built corner Diversey and Frank, for the Lincoln Ice Company. For Thomas Boyle, a three-story residence, to be built on Diversey avenue near the park; Dell Rapids granite front.

Architect John Otter: For A. R. Varian, a three-story flat building on Fullerton avenue near Larrabee street; Indiana pressed brick and stone, bathrooms, mantels, steam heat, etc.; cost $9,000.

Architect W. L. Carroll: For Ferdinando Guerra, a three-story flat building at 272 W. Harrison street; Bedford stone front, mantels, stained and beveled glass, etc.; cost $8,000. For James L. Manning, a two-story residence, corner of Fullerton and Elston avenues; pressed brick, terra-cotta and stone front, mantels, stained glass, furnace; cost $5,000. For Geofirey Bros., a six-story hotel.

Architect Henry Sierks: For H. Fillmann, a two-story residence on Surf street; Bedford stone front, steam heat; cost $16,000.

Architect H. M. Hansen: For Gerge Meyer, a two-story residence at 1781 Deming Court; Bedford stone front, copper trimmings, steam heat; cost $16,000. For A. R. Da Costa, a two-story residence at 645 Cleveland avenue; stone front, furnace, etc.; cost $7,500.

Architect Frederick Ahlschlager: For George C. Tetgmeyer, a three-story flat building, corner of Union and Mark streets; St. Louis pressed brick and Bedford stone; cost $7,000. For Reformed Congregation of South Holland, a frame church, stone basement, stained glass, pews, two furnaces, slate roof; cost $15,000.

Architect C. L. Stiles: For J. F. Talbot, two three-story residences at 568 and 570 Washington boulevard; stone fronts, furnaces, etc.; cost $16,000. Also finishing plans for Belden Avenue Presbyterian Church; red brick, with brownstone, stained glass, pews, steam heat; cost $15,000. Also getting out plans for an eight-story apartment house, to be erected on the South Side; stone front, steam heat, elevator; to be fireproof, etc.; cost $120,000.

Architect H. S. Jaffray is working on plans for two three-story flat buildings, to be built on Langley avenue near Forty-third street; Bayfield brownstone fronts, mantels, furnaces, etc.; cost $16,000.

Architect L. G. Hallberg is taking estimates for a four-story apartment house, to be built on Superior street, for T. J. Shay; cut stone front, steam heat, etc.; cost $30,000. For Dr. J. H. Salisbury, a two-story residence, on Adams street near Western avenue; Indiana pressed brick and stone, furnace, etc. For John A. Larson, a five-story store and flat building, at 303 to 309 Wells street; Collinsville pressed brick and stone front; cost $50,000. For O. Adams, eight three-story frame apartments, to be erected at Longwood.

Architect H. B. Wheelock: Finishing plans for four-story printing establishment, to be built at 57 Third avenue. Also just started on Congregational Church at Decatur, Illinois.

Architects J. F. & J. P. Doerr: For Julius Cook, planning a four-story apartment building, to be built corner of Morgan and Erie streets; stone front, elevator, etc.; cost $30,000. For John A. Adams, a three-story store and flat building corner of Twenty-ninth and Butler streets; Anderson pressed brick and Bedford stone; cost $16,000. For C. A. Londelius, three residences at Thirty-eighth street and Prairie avenue; Bedford stone fronts, furnaces, mantels, etc.; cost $15,000.

Architect O. W. Marble: For William H. Pruyn, four three-story residences on South Park avenue, near Thirty-fourth street; Bedford stone fronts; cost $50,000. For John W. Hersey, a three-story flat building on West Monroe street; Anderson pressed brick and brownstone; cost $20,000.

Architect H. R. Wilson: For George W. Park, a three-story residence on Grand boulevard, near Forty-second Place; Salem stone front, furnace, mosaic tiling, electric light, etc.; cost $15,000.

Architect M. E. Bell: For Mrs. Marie Wilkie, taking estimates for a handsome three-story residence, to be erected on corner of Wrightwood avenue and Sidney Court; Waupaca granite front and sides, copper and wrought-iron work, steam heat; cost $50,000.

Architect John Duncan: For J. H. Neusome, three residences, to be erected on Forest avenue, near Thirty-ninth street; brownstone fronts, furnaces; cost $22,000. For C. C. Beam, a five-story store and flat building, to be built on

Halsted, near Polk; pressed brick, stone and terra-cotta; elevator, steam heat; cost $50,000. For a syndicate, a six-story store and flat building, to be erected on Clark street near Harrison; elevators, steam heat, pressed brick, terra-cotta, bathrooms, etc.; cost $40,000.

Beers & Lane have planned a railway station, to be built at Roodhouse, Illinois, for the C. & A. Railway Co.; cost $25,000.

Architect William Thomas: For J. K. McGill, a three-story residence on Adams street; Anderson pressed brick and stone; cost $10,000. For James McGraw, a three-story residence on Adams near Oakley; St. Louis pressed brick and Bedford stone; cost $12,000. For A. Flannagan, a two-story flat building at 927 Polk street; cost $6,000. For Louis Carter, planning a three-story flat building, to be built corner of Ashland and Nebraska; Bedford stone front, copper bays, steam heat; cost $17,000.

Architect Swen Linderoth: For C. O. Lindstrom, planning six dwellings, to be built at Austin; frame, furnaces; cost $18,000. For H. Pearson, a three-story flat building on W. Erie street; cost $9,000. Also making plans for a seven-story factory, size 150 by 125 feet; cost $70,000; steam heat, elevators, cement floors, etc.

Architects Ostling Bros.: Planning a four-story flat building, to be built corner of Franklin and Locust; Bedford stone front; cost $40,000.

Louis Martens: For Mrs. Flora Caruthers, a four-story apartment and store building, on northeast corner of Schiller and Clark; cost $50,000. For Williams Brothers, at Antioch, Illinois, a double store building; to cost $18,000; Collinsville pressed brick and stone, steam heat, elevator, etc. For C. H. Martens, three residences, to be built on Ashland boulevard, near Polk street; Bedford stone fronts, furnaces, etc.; cost $18,000.

Architect R. G. Pentecost: For John Burke, on northeast corner of Greenwood avenue and Fifty-fourth street, a three-story residence; brownstone front, hot water heating; cost $18,000; making plans. Also planning a three-story residence for Edward Mendel, to be built at 3930 Grand boulevard; stone front, hot water heating; cost $14,000. For C. R. Cave, a three-story residence, to be erected at 3932 Grand boulevard; Kasota pinkstone front; cost $14,000. Also preparing plans for a block of five three-story stores and flats, to be erected at northwest corner of Thirty-first street and Bonfield avenue, for Mrs. De Lancy; pressed brick and stone, stained and plate glass, bathrooms, mantels, etc.; cost $40,000. For Jacob Weil, twelve three-story stores and flats on State and Forty-seventh; the front will be 288 feet, constructed of buff Bedford stone, with copper bays and cornices; all the improvements will be put in; cost $120,000.

Architect J. J. Egan: Finishing plans for Catholic Church, to be erected at Des Moines, Iowa; Bedford stone all round; cost $70,000. Also completed plans for Rev. Bishop Scanlan, residence at Salt Lake City; steam heat, etc.; cost $18,000. Planned a three-story residence for O. S. Lyford, on Lake Park avenue; Bedford stone front; cost $15,000. Getting out plans for a modern apartment house, to be built on Vernon avenue near Thirty-fifth street; Bedford stone, elevator, steam heat; cost $30,000. Will make plans for addition to Mercy Hospital at Dubuque, Iowa; to cost $50,000. Also working on plans for Academy of the Sacred Heart, to be erected at Ogden, Utah; pressed brick and stone, steam heat and modern improvements; cost $90,000. Planning a three-story flat building for B. Heeney, to be built on May street; cost about $8,000.

**Cincinnati, Ohio.**—Reported by Lawrence Mendenhall.

I am not going to write about strikes, for the papers have been full of them, and consequently what I would say might be a repetition. The weather also will be passed and left to "Old Probabilities." But what I will say is, that Cincinnati has no reason to feel proud of her building statistics. There may be very good reasons for the very small aggregate, but $1,143,214 is not what should be expended in a city of 325,000 inhabitants for building. It may be that fear of being taxed, the returns to the inspector are made small; this I cannot say. For brick and stone structures, 594 permits; for frame, 794 permits, and for alterations 707 permits were issued, resulting in an income of $8,066.51 to the inspector's office. The indications this year are that totals and receipts will be increased alike, providing strikers do not scare the hen off the nest.

Architect A. O. Elzner is preparing plans for the remodeling of A. J. Seasongood's house. Materials to be used are brick, stone, mosaic tiling, hardwood mantels, stained glass, etc.; cost not yet known. Also for Charles H. Kellogg, Jr., a residence. Materials, pressed brick, stone, molded brick, plumbing, hot water heating, stained glass, slate roof, etc.; cost $15,000.

Architect W. W. Fromholz follows: For Charles Hofer, Esq., of Avondale Ohio; materials, frame, hardwood finish, wood mantels, plumbing, stained glass, tiling, electric bells, etc.; cost $6,000. For Nathan Meis, a residence; materials, pressed brick, blinds, hardwood finish and mantels, furnaces, plumbing, stained glass, laundry fixtures, slate roof, etc.; cost $9,000. For Hon. John B. Mosby, mayor, a residence; materials, pressed brick, slate roof, stained glass, furnaces, electric bells, hardwood finish, plumbing, wood mantels, etc.; cost not given. For F. A. Smith, Esq. (H. D. Smith & Co.), a residence; materials, stone, frame, pine finish, wood mantels, furnaces, plumbing, stained glass, slate roof, etc.; cost $9,000. For Robert C. Price, Esq. (Johnston Building), a residence; materials, stone, shingle, blinds, mantels, furnace, hardwood, stained glass, etc.; cost $10,000.

Architect H. E. Siter reports for Charles Schreiber (L. Schreiber & Sons), a residence; materials, frame, furnaces, pine and hardwood finish, mantels, plumbing, stained glass, gas fixtures, blinds, slate roof, etc.; cost $7,000. For Bradford Shinkle, Esq., Covington, Kentucky, a residence; materials, frame, hardwood finish, mantels, plumbing, stained glass, electric bells, etc.; cost $10,000. For Edmund E. Miller, Esq. (Third and Walnut), a residence; materials about the same as the above; cost $10,000.

Architect A. C. Nash is making the plans for a seven-story, stone front addition to the St. Nicholas Hotel, E. N. Roth, proprietor. It will prove quite an addition to the architecture of our city. Cost not known.

Architects Des Jardins & Hayward report for the German Lutheran Church, Walnut Hills, city, a church edifice; materials, blue limestone, stained glass, pews, pine finish, furnaces, slate roof; cost $12,000. For Dr. M. T. Keyt, a residence; materials, pressed brick, blinds, wood mantels, hardwood finish, laundry, stained glass, tiling, plumbing, tile roof, etc.; cost $10,000.

Architects S. Hannaford & Sons report for Mr. R. H. Crane (R. H. Crane & Co.) a residence; materials, frame, hardwood finish, mantels, furnace, stained glass, plumbing, blinds, slate roof.

Architect Edwin Anderson has drawn plans for a dwelling and stable for Charles H. Miller, Cumminsville (city); materials, brick; mantels, furnace, blinds, laundry, plumbing, stained glass, etc.; cost $7,000 For F. G. Huntington, Esq., a row of dwellings (five); materials, pressed brick, blinds, plumbing, laundry, furnaces, pine finish, etc.; cost $25,000.

Architects G. & A. Brink have drawn plans for a store and flat building for M. Rothschild (Fifth and Race); materials, brick and frame, pine finish, blinds, mantels, grates, plumbing, electric bells, etc.; cost $10,000. For Anton Zimmerman, a tenement house; materials, brick, pine finish, bells, blinds, iron mantels, plumbing, gas fixtures, tin roof, etc.; cost $9,000.

Architect John H. Boll reports for Thomas Gannar, a flat and store; materials, iron, brick, blinds, iron and slate mantels, plumbing, electric bells, tin roof, etc.; cost $6,000.

Architect J. Rueckert has prepared plans for a residence for William Grautman (board of education); materials, frame and shingles, blinds, pine finish, wood mantels, plumbing, stained glass, gas fixtures, laundry, etc.; cost $7,000. For A. & W. Amlung, a store; materials, iron, pressed brick, store fixtures, elevator, tin roof, etc.; cost $7,000.

Architect William Martin Aiken reports for Fern Bank, Ohio, a town hall; materials, brick, slate roof, furnaces, pine finish, blinds, plumbing, etc.; cost $12,000. Remodeling Christ Church (P. E.). This is one of our old churches, and in order to keep pace with the times and its requirements will be remodeled. The nature of the improvements has not been decided upon definitely, the sum, $12,000, subscribed, not admitting, however, of very elaborate work.

**Cleveland, Ohio.**—Building continues quite brisk, the strikes not having interfered with business to any degree.

Architects Hardway & Williams: For C. H. Bulkley, interior alterations to store and hotel building; cost $15,000. For H. E. Hays, a two-story frame dwelling, size 38 by 39 feet; cost $7,000. For George Callings, two-story frame dwelling, size 43 by 48 feet; and barn, size 19 by 27 feet; cost $18,000.

Architects Lehman & Schmitt: For Joseph Hays, a five-story store building, size 45 by 76 feet, brick and stone; cost $15,000; builder, W. R. Thomas. For L. Einstein, a two-story dwelling, size 35 by 66 feet, brick and stone; cost $10,500.

Architect A. M. Smith: For Bradley estate, a four-story store and dwelling block, size 30 by 123 feet, brick and stone; cost $25,000.

Architect B. F. Van Develde: For the Sisters of St. Joseph, a two-story brick convent, size 44 by 58 feet; cost $12,000.

Architect Clarence O. Arey: For C. H. Carr, a two-story frame dwelling, size 30 by 50 feet; cost $6,500.

Architects Cudell & Richardson: For Cleveland City Cable R. R. Company, a two-story office and power-house building, size 85 by 188 feet, brick and stone; cost $50,000.

Architect J. W. Russell: For John E. Ensign, a two-story frame dwelling, size 25 by 45 feet; cost $5,000. E. A. Cass, two two-story frame dwellings, size 22 by 40 feet; cost $8,000; builder, C. A. Preston.

Architect F. C. Bate: For Pain & Akers, alterations for frame hotel; cost $4,600. For Alford Arthur, a three-story store and dwelling block, 64 by 66 feet, brick and stone; cost $18,000.

**Columbia, Mo.**—Architect F. P. Miller: For the St. Paul's Methodist Episcopal Church, a new brick church, size 40 by 65 feet; cost $4,500; also additions to the Calvary Episcopal Church; cost $4,200.

**Denver, Colo.**—Architects Huddart & Jacobson: For the school board of District No. 1, a four-roomed brick and stone schoolhouse, size 86 by 62 feet; cost $26,700. For J. W. Armstrong, a two-story residence, brick and stone, size 42 by 60 feet; cost $13,000. For Morse Block, a two-story and basement dwelling, brick and stone, size 50 by 75 feet; cost $26,000. For J. S. Cleveland, a two-story pressed brick and stone residence, size 40 by 81 feet; cost $19,600. For J. C. Nevin, a two-story residence, brick and stone, size 26 by 50 feet; cost $5,300. For S. McClair, a brick and stone terrace, size 102 by 70 feet; cost $36,000. For G. Bonn, a two-story residence, brick and stone, size 26 by 50 feet; cost $5,300.

**Detroit, Mich.**—The "bone of contention" is, here as elsewhere, the recognition of the union. The position of the employing carpenters and members of the Exchange is set forth in the following resolution:

"WHEREAS, In the existing state of society, when all classes of mechanics are forming unions for the promotion of their peculiar interests, and the protection of their rights in the community, it becomes the duty of the employers, also, to unite in protecting themselves against any unjust or unreasonable demand that may be made upon them; therefore, we, the carpenter contractors and manufacturers of the city of Detroit, do

"*Resolve*, 1. That we assert our right to employ workmen regardless of their being members of societies or not. 2. That we assert our right to fix the compensation of labor and to pay workmen according to their usefulness and according to the amount of labor they can perform. 3. We shall not tolerate any authority in our shops or buildings but our own. 4. All work exceeding ten hours shall be paid for at the rate of time and one-half, or fifty per cent additional pay per hour. 5. That for the year 1890, nine hours shall constitute a day's work. 6. That for the year 1890 carpenters shall be paid according to their efficiency, but in no case more than 30 cents per hour, nor less than 20 cents per hour. 7. That we will treat with our men as individuals only. 8. That we assert our right to employ as many apprentices as we deem proper."

A prominent member of the Exchange told your correspondent today that none of the larger or competent contractors had signed the scale, and that he was ready to take any work which might be placed in his hands; and that none of the older contractors would sign the scale, all reports to the contrary notwithstanding.

Still the building interests of the community have received a blow from which it will take many months to recover.

Architects Donaldson & Meier: For J. H. Haberkoon, a two-story brick dwelling, size 26 by 60 feet; cost $8,000.

Architect E. W. Arnold: For William Brown, a brick residence; cost $7,000. For Charles K. Whitman, at Ann Arbor, a brick dwelling; cost $5,000. For the Episcopal Church, at Hickory, N. C., a brick and stone church; cost $10,000. Also for H. C. Parke, of the same place, a frame residence; cost $5,000.

Architect Henry Englebert: For Mrs. Londsberg, three two-story stores and dwellings, brick; cost $10,000. For Capt. William Wilson, a three-story brick store and dwelling block; cost $12,000. For the St. Francis Parish, a brick chapel and schoolhouse; cost $18,000.

Architect Harry J. Rill: For William Wolfe, a two-story brick dwelling block, size 106 by 90 feet; cost $12,000. For Henry W. Holcombe, a three-story double dwelling, brick, size 38 by 50 feet; cost $7,500. For R. Bell, six three-story brick dwellings, size 83 by 95 feet; cost $16,000.

Architects Malcomson & Higginbotham: For The National Christian Woman's Board of Missions, at Ann Arbor, a mission building of boulder stone, red slate roof, size 65 by 100 feet; cost $20,000.

Architect Gordon W. Lloyd: For Reid & Whitney, a three-story brick manufacturing building, size 100 by 120 feet; cost $37,500.

**Duluth, Minn.**—A large hotel will be erected here this season at a cost of $250,000.

**Grand Forks, N. Dak.**—The outlook here is very promising; the recent rains having put new life into all branches of business.

Architect Hugo Krisk: For Burke Corbet, two-story frame residence, size 38 by 50 feet; cost $10,000. For Judge Curliss, two-story dwelling, size 36 by 46 feet; frame, with hot water heat; cost $6,000. For J. E. Clifford, two-story frame dwelling, size 34 by 36 feet; cost $4,000. Also for the Hon. Alex. McKinnon, at Croakston, Minnesota, a three-story block, size 50 by 100 feet; pressed brick and Portage stone; cost $20,000; contracts not let.

**Grand Rapids, Mich.**—Architect B. L. Gilbert, of New York. For Dr. Charles Hazeltine, a stone and frame residence; cost about $15,000.

Architect T. K. Williamson, of Philadelphia: For the Fuller estate, a six-story business block; pressed brick and stone; estimated cost $50,000.

Architect G. O. Fairfield: For W. A. Bakey, a frame dwelling; cost $10,000.

**Jackson, Mich.**—Architects Johnson & Archer: For L. H. Field, a brick and frame residence; cost $10,000.

**Pittsburgh, Pa.**—Architects Longfellow, Alden & Harlow, of Boston, have plans for alterations and additions to Farmers' Deposit and National Bank; contract not let. For J. J. Vandergrift, an office block, size 60 by 110 feet, granite.

Architects Bickel & Brennan: For Edward Kelly, four four-story store buildings with pressed brick fronts; cost $23,000.

**Rochester, N. Y.**—Architect J. G. Cutler is preparing plans for a stone and pressed residence for H. C. Brewster, to be built on corner East avenue and Bowen street; the sanitary and electric work will all be of the very best, and the house will be finished in hardwood cabinet work; cost $23,000. Also plans for alterations to Mr. R. A. Seeley's house at Lake View Park; cost $8,000. A frame house for George B. Watkins; to cost $7,000. A stone and frame residence, to be built in Watertown, New York, for Mr. B. L. Taylor; cost $20,000. Two frame houses for J. G. and J. W. Cutler; cost $6,000 each.

Architect A. E. French: For Dr. F. D. Wheeler, a two-story residence, size 32 by 64 feet, brick and stone; cost $8,000.

Architects Jay Fay and O. W. Dryer: Plans for a block of four flats for Mrs. Sophia Davis; to be four stories high, of stone and brick; cost $9,000. Double house for Mr. Charles Sherman, frame; to cost about $6,000.

Architect Otto Block: Plans for new front to the Lutheran Evangelical Church; will contain vestibule, library, galleries, stairs, etc.; to be built of stone, brick and terra-cotta; cost $6,000. Plans for St. Stanislaus Church, size 40 by 80 feet, frame, seating capacity 375; cost $10,000. Frame house for J. B. Alexander; cost $5,000. Frame house for Mrs. Erbe; cost $8,000. Roman Catholic School at Charlotte, New York, additions 34 by 54 feet, two schoolrooms and an assembly hall; cost $5,000. Frame house for Frederick Schaffner; cost $5,000.

**Sioux City, Iowa.**—Architect G. G. Baldwin has prepared plans for a German church to be built here this season.

**Somerset, Ky.**—Architects Johnson & Archer: For the city board, an eight-room brick schoolhouse; cost $19,000; also a four-room brick schoolhouse; cost $7,000.

**St. Louis, Mo.**—Architects Bothe & Raterman: For the St. Louis Bowling Association, a two-story brick club house; cost $8,000. Rev. H. Hirckestein will erect a two-story brick church and schoolhouse; cost $5,900.

**Tacoma, Wash.**—Architects Proctor & Dennis: For John B. Hudson, a store building, brick and stone; cost $15,000.



Inland Architect Press.

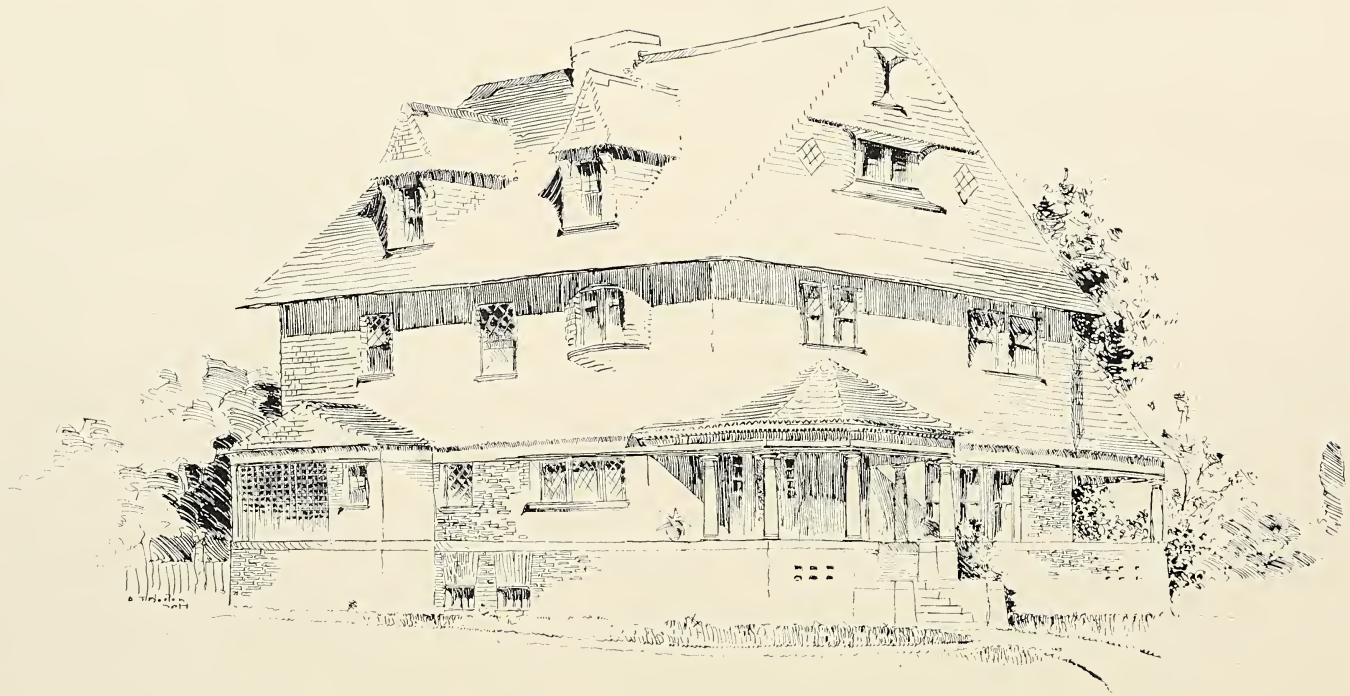
STATUE TO SURMOUNT THE INDIANA SOLDIERS' AND SAILORS' MONUMENT.

Modeled by George P. Brewster, Cleveland, Ohio.

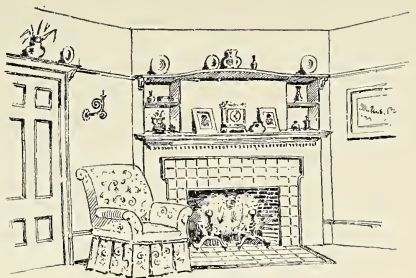


BLOCK OF RESIDENCES FOR H. R. WILSON, CHICAGO.

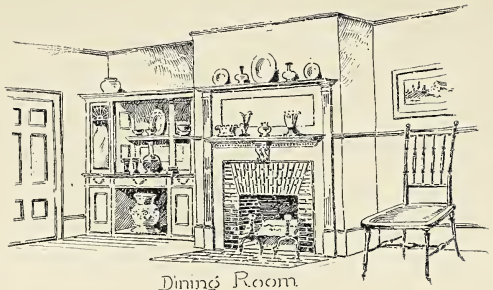
H. R. WILSON, ARCHITECT.



House for Mr. D. Pleyte · Denver.
Varian & Sterner Archts



Study



Dining Room




Plan 1st Story

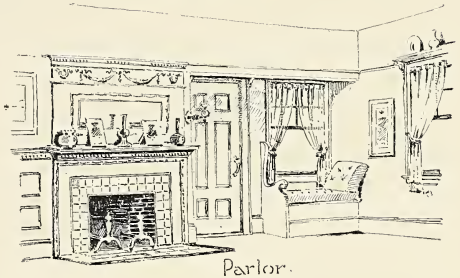


South East View

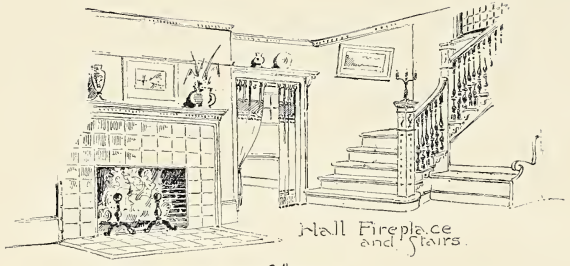
South West View



Study Book case.



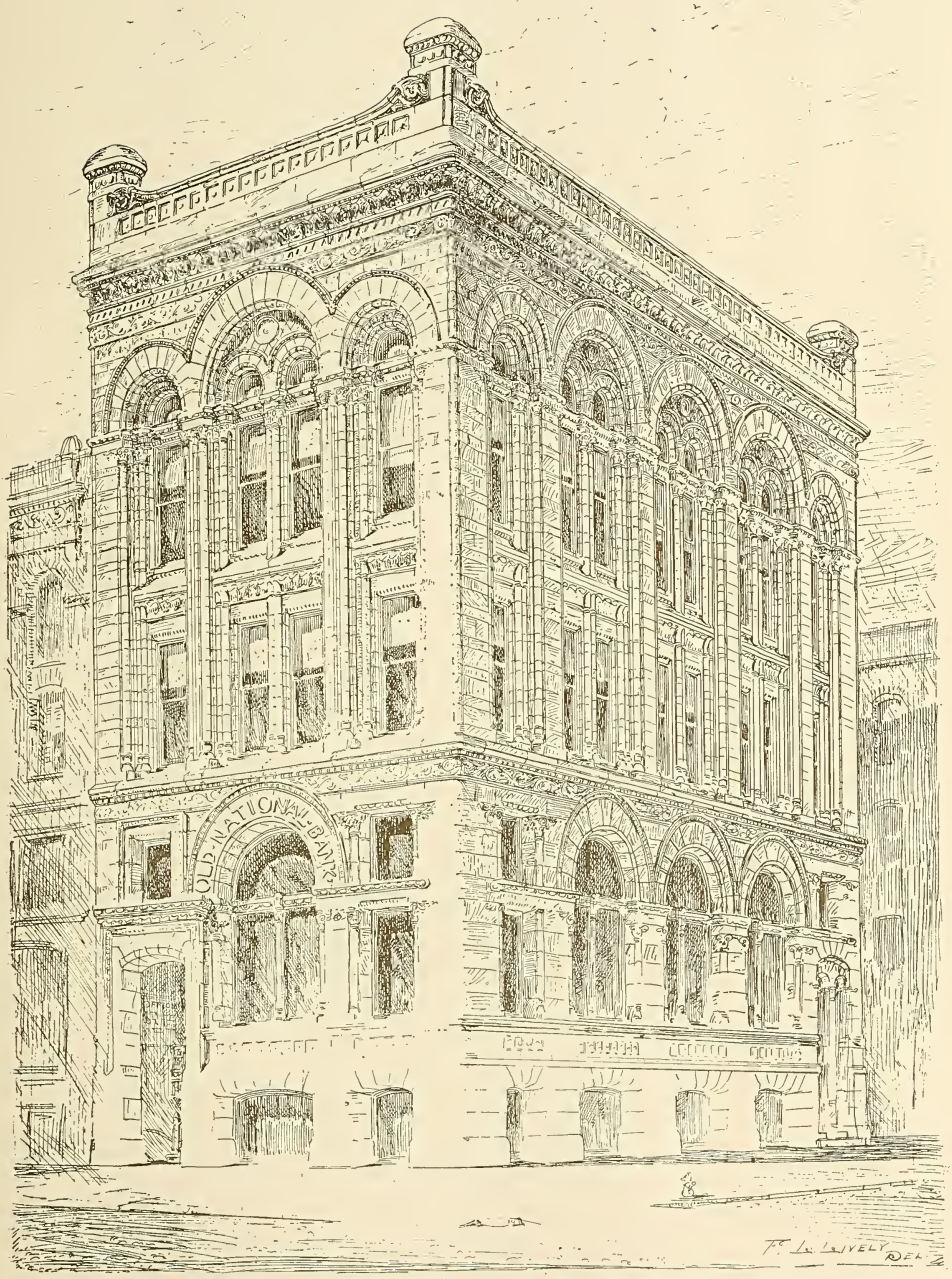
Parlor.



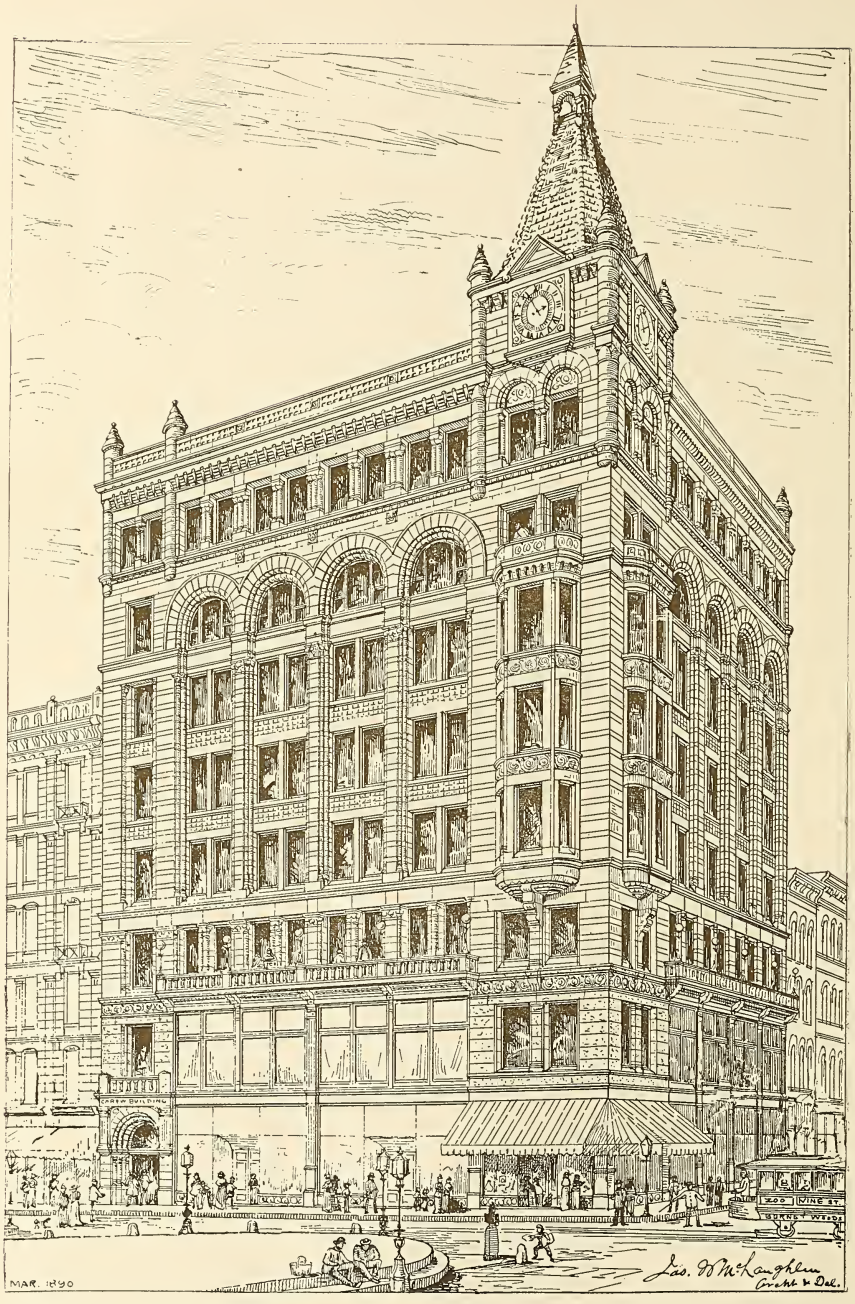
Hall Fireplace and Stairs.

Sketches of House for Wm H. Rideing · Jamaica Plain · Mass.

Sanford Phipps · Architect. Boston.

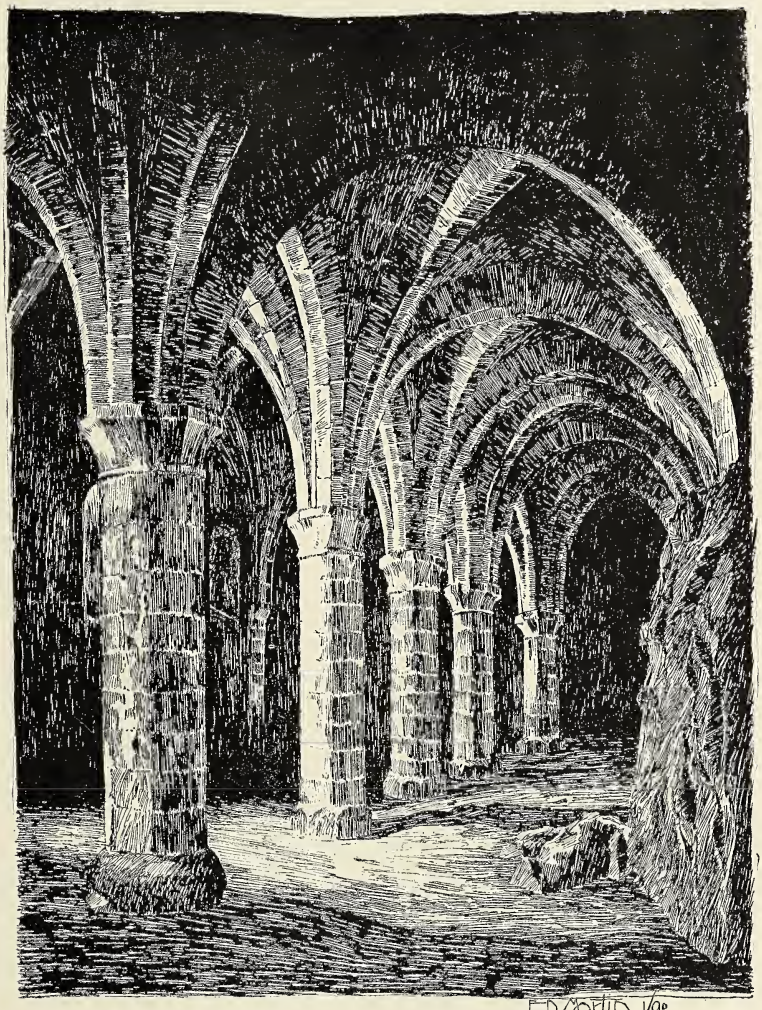



B. F. TOLAN ARCHT. — THE OLD NATIONAL BANK — FORT WAYNE, IND. 1890.

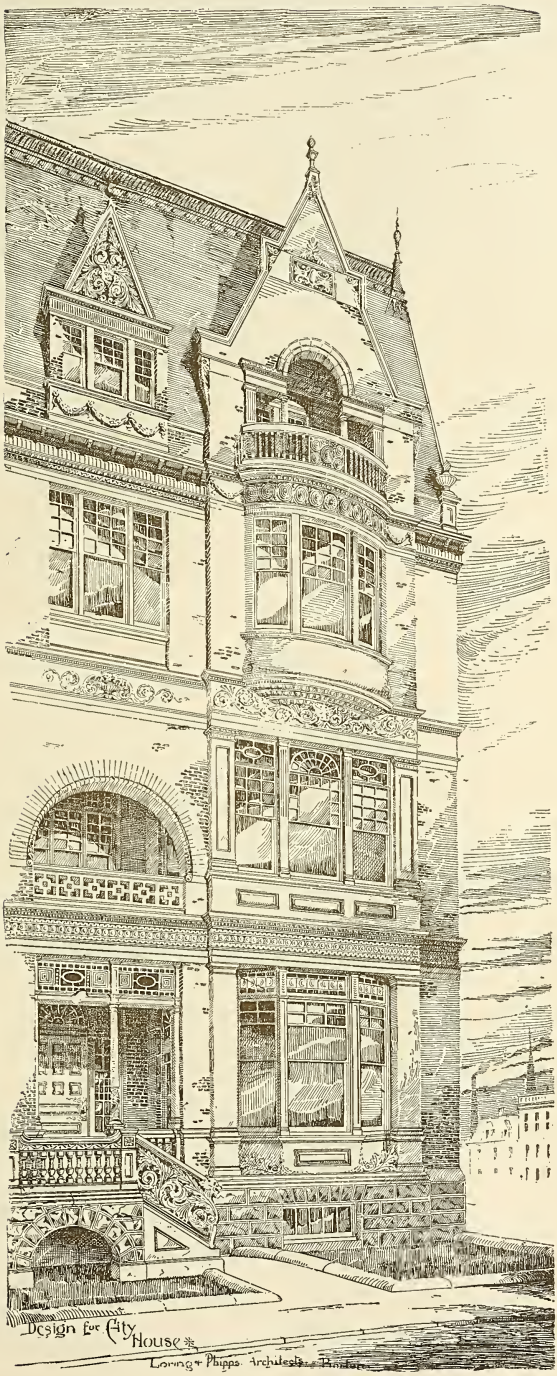



THE NEW CAREW BUILDING
COR of VINE & 3Tth STS.


John F. Jackson
1890
Farm le Cédarlot,
St. Contest France




There are seven pillars of gothic mold,
In Chillon's dungeons deep and old;


Design for City House.
Loring & Phipps. Architects. Boston.

JULY, 1890.

# THE INLAND ARCHITECT

AND NEWS RECORD.

*A Monthly Journal (with an Intermediate News Number) Devoted to*

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CONSTRUCTION, DECORATION AND FURNISHING

IN THE WEST.

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Death of Architect D. H. Bohlen, of Indianapolis.

The death of Architect D. H. Bohlen, of Indianapolis, occurred last month in that city. Mr. Bohlen was born 1827 in Kattenberge, Hanover, and came to America in 1850. After having traveled over the United States and Mexico, he made Indianapolis his home, and resided there about thirty-five years. Though confined to that state, his practice, as an architect solely, was extensive, and his works throughout show most scrupulous care in design and construction, and they are of more than ordinary merit. Mr. Bohlen was well known as a very studious scholar of exceptionally high attainments. His integrity in general, and his conscientiousness in the practice of his profession were such, that he was much honored and looked upon as a criterion by both layman and architect. The Indianapolis Chapter of the American Institute of Architects announces, with extreme regret, the death of Mr. Bohlen, who was a Fellow in good standing of the American Institute of Architects at the time of his death, and president of the Indianapolis Chapter during two years.

Reported Decay of Cleopatra's Needle.

An interesting sketch of the history of Cleopatra's Needle was brought out by the recent inquiry in the house of commons as to the action of the weather upon the obelisk. Mr. John Dixon, who was employed by the government to make a critical examination, in writing to the London *Times* upon the subject, says, "After making a careful personal examination of the monument, my critical eye fails to detect upon its surface a sign of any decay whatever. Were there such, there could be no doubt there would be grains of the stone lying on the altar steps and top of the pedestal. I climbed up, and could not see one sign of any decay. I also could see glittering points on the surface of the solution of silica supplied to me by the skilled chemists of the British Museum, at the suggestion of my old friends, Sir Richard Owen and Dr. Birch, and of which three coats or washes were given with the greatest care before the trunnions and fastenings for the final lift were placed around it." There is another reason, also, he goes on to remark, in the natural composition of this peculiar bed of syenitic granite that crosses the valley of the Nile at the First Cataracts, and from the quarries at the small village of Syene from which all the known obelisks were cut, namely, the total absence of mica in the stone. In all other granites this readily destructible material exists. Moreover, it must not be forgotten the centuries that have passed away since this ancient monument was erected by the Pharaoh Rameses II at the main gateway of his great temple at On, the Heliopolis of the Greeks. There it stood for eighteen centuries, and was about twenty-three years B.C. removed by order of Cleopatra to the palace she was erecting at Alexandria for her friend and constant visitor, Julius Cæsar. The architect appointed by her was Pontius, the father of Pontius Pilate the governor of Judea. The rounded corners of the bases of these two obelisks had doubtless been chipped off by the gatekeepers at On and sold to the pilgrim visitors. Pontius Architante had eight bronze crabs cast, and placed them under the rounded corners of the stones, and on the big claw of one of the two crabs which alone remained was, when the pedestal was cleared of its surrounding sand, found this inscription: 'In the sixth year of Augustus

Cæsar, I, Barbarus, Prefect of Egypt, caused these obelisks to be erected by Pontius, the architect.' Since then another nineteen centuries are passed, and even this 3,700 years of weathering has not erased one single portion of the hieroglyphs."

Imported versus Domestic Structural Steel.

The recent offer of a Belgian steel manufacturing firm to supply structural iron for the Minneapolis court house and city hall at twenty-five per cent cheaper than it can be furnished by Pittsburgh, has brought up a curious yet practical phase of the tariff question. A recent letter by Architect W. L. B. Jenney to the Chicago *Tribune*, in explanation of this peculiar state of the steel market, is given on another page. It seems to us that while a protective tariff sufficient to allow the manufacturer a fair profit has been of enormous value, and is still to the growth of the country, the introduction of the trust or combination system among manufacturers is in a fair way to destroy all the benefits the public has derived from the tariff, and the logical conclusion is that if the government increases a tariff under which an industry has flourished, so as to make it prohibitory, it becomes a party to the trust conspiracy. In steel manufacturing, the mills have for years been content with a much lower price than is at present obtained, and if a further rise in the present tariff is established, and foreign manufacturers shut out, the only result possible is the substitution of cheaper material and a deterioration, not only in the number of buildings built, but of the fireproof qualities, in fact threatening the entire fireproof system which it has taken architects years to establish, and which makes modern American buildings the cheapest, most permanent and fireproof in the world.

End of the Carpenters' Strike in Chicago.

As it will probably be some time before we are again called upon to comment upon a strike in the building trades in Chicago, especially among the carpenters, we will here congratulate the contractors upon the manful way in which they have not only fought and conquered the lawless element in the union, sending all offenders to the grand jury under bonds, or punishing them by heavy fines for their lawless acts, but upon the success with which they have filled the places of the striking carpenters with good and capable men. If men can learn anything from experience, the carpenters of the United States should know the folly of blindly following the lead of a head agitator at Philadelphia or anywhere else. As we have said since the commencement of the strike, it was senseless, and causeless except as far as the schemes of those who live and profit by labor agitations may be called a cause. The victory is the more signal because the only basis of action of the carpenter contractors was the principle of personal rights of the individual guaranteed by the constitution, and the utter refusal at all times to consider anything that tended toward the even passive recognition of a body that has for its foundation the usurpation of those rights. Almost four thousand carpenters have been received and given work by the association since those who were doing this work left it for others. More than thirty cases of assault or intimidation have been successfully prosecuted, only one or two of those arrested escaping just punishment. Though no general arrest of the entire union council has been made under the Merritt conspiracy law, and, as the union has so entirely left the field, probably will not be, more than enough evidence has been collected to make conviction certain. We are heartily sorry for the large mass of union carpenters who, misled by their leaders, have allowed others to take their places and now must seek elsewhere for the work that has gone into the hands of strangers, as the contractors, feeling that it is unsafe to employ those who have belonged to the union, are inclined to refuse them work, especially as there are more than enough non-union men in the city to fill any present or future need.

Explanation Regarding the Smithmeyer Removal.

The world, that is, the architectural world, knows the general history of the congressional library and Mr. Smithmeyer's connection with its progress. How he saw the great need for a large building not only capable of holding the national library, but one that would relieve the capitol of books, pictures, documents; in fact, everything of a museum nature that obstructs legislative work there. He was appointed architect, and for fifteen years studied his problem, spending much time in Europe for this purpose. That most disreputable result of political intrigue, the removal of Mr. Smithmeyer from the office of architect of the national library, and his subsequent suit against the government to recover payment for services, is described by "Gath" (George Alfred Townsend) in a recent newspaper article, as follows:

> Smithmeyer having got into a quarrel with a congressman, who was sustained by the bulk of other congressmen, because they were in the same business, was unceremoniously pitched out of his place. He was from Vienna, and not altogether up to the patience required in a republican government, where every congressman wants to introduce a stone quarry through the architect, and at the same time desires not to have his honor suspected. The architect mistook the indignation of a man whose quarry was not used for an attempt to override him. Congress gave the construction of the incident to their colleague, of course, who was probably right. The quarry owner shoved the congressman up; the congressman must needs have the architect go up and see the quarry; the quarry not being adopted by the architect, the quarry owner pouted and swore, and the congressman must needs do the same. Thus, at last, the source of all corruption is the people themselves. The explosion comes out in their representative at the top, who is menaced on every side unless he takes care of his constituents. The Court of Claims, which I have mentioned, not having the fear of the people before its eyes, since its judges hold fixed terms or long tenures, gave Mr. Smithmeyer near $60,000 instead of about $160,000 he had sued for. It seemed to me that the amount and the manner of settling showed attention to the public interests, as well as to our self-respect, which should not allow this government to be a repudiator or a squatter on its obligations.

Mr. Townsend has a way of getting at facts and fearlessly making them public that should be embarrassing to the politicians who use their high offices for private ends, and while it may not stop such dishonorable and unjust work as the Smithmeyer removal, it will certainly enlighten the public regarding the character of the men it elects to office.

Canadian Versus American Architects.

Toronto, Canada, is the most "American" city in the Dominion, as the casual traveler expresses himself on the signs observable on every hand, of rapid growth and progress. The new buildings, of which there is a Chicago-like quantity, comparative to the size of the city, are modern in design and plan. It is destined to be a great city. But like great cities in this new world, especially in these latter days of rapid improvements in method and requirements, it is not strange that some mistakes are made both by architects and those who limit the cost of the building so as to secure the largest amount of ground covered and atmosphere above it encroached upon at the least possible expense. As American architects are involved in the criticisms we may make, the Canadian profession will not take them as an attack upon it, nor unduly say that Canadians would have done better. In this we believe that the owner should select his architect. If those at

home either of his city or country have proved to his satisfaction by their works that they are fully capable, it would be proper to employ "home talent," but not otherwise. The "foreigner" is apt to make innovations that would not be allowed home talent, and the latter profit by the example set. This is the history of all new cities. Just now there is a disposition on the part of the home architect to say "I told you so," and with some apparent cause. A competition of some note was decided, and on the merit of the design, that of an American firm was accepted. The building, some seven stories high, was erected, and, as we understand it, ready for the roof, when a general disposition to go to pieces was observed. Investigation showed that no footing stones had been placed under the walls. There may be extenuating circumstances connected with this omission, but it is hard to realize them. Eventually the work was given to an engineer and he appointed an American architect to correct and complete. We saw the building, and it is excellent in design, and when completed will be an ornament to the city.

The Ontario Parliament Buildings at Toronto.

These are mistakes that are liable to happen, and when they do, bring discredit upon what should be the most accurate of the professions; but there was another mistake that shows a policy that is too common and which the severe examples that appear from time to time illustrative of its folly do not seem to correct. The history of the new parliament buildings, the competition that was rejected by an expert, and the final appointment of that expert as architect is too well known to require comment. The architect found sufficient reasons in the peculiar circumstances to feel secure from any charge of unprofessional conduct. The original estimated cost has, as is common with government buildings, increased four-fold, and the stately pile, good in design and construction, covers several acres. We inspected this building recently, and received a surprise equal to that occasioned by the footing stone incident to find that the entire interior structure was of wood. Not a steel beam or joist could be observed in the entire building. A block distant stand the ruins of what was a few months ago perhaps the finest building in Canada. It was built thirty years ago, and the policy that made the handsome shell a veritable fire-trap led to the use of coal oil lamps instead of gas and the nearest hydrant a quarter of a mile distant. It only needed a careless janitor carrying lighted lamps on a tray to stumble, and the combination of circumstances that the false economy of the trustees in charge had arranged, to destroy a magnificent building and a library that cannot be replaced. And in sight of this object lesson in penny wise pound foolish policy the government, to save an expenditure of less than half a million dollars, is repeating with the utmost fidelity to detail the example set by the university trustees. In these days of cheap fire-proof construction it seems almost impossible that men can be found in official station so entirely lacking in common horse sense. Better a frame shed with brick vaults to store the government records that are beyond price, than a costly shell of stone with a heart as combustible as a haystack. These are some of the things that one sees in Toronto, and they are all the more inexplicable because of all the marks of wealth, refinement, progress and business ability that one sees on every hand. It will be a great day for the public as well as the profession when all architects can not only design and construct properly, but be able to say to their clients, "It must be built this way or not at all." Until then we will have, even in our most progressive cities, these examples of progress and poverty.

Municipal Opposition to the World's Fair Plans.

It is three months since the board of directors for the World's Fair was elected, and up to date nothing tangible has been done toward the work of preparation. For this state of things the directory has been criticised and, we think, unjustly. The work of preparation is enormous, and every sort of difficulty presents itself that, unknown to the public, form obstacles in the way of progress. The contest over a site for the fair was long, there being so many presented, and with good arguments in favor of each. Those who have given the question any amount of study have felt that the ideal plan was to place the main building or buildings containing exhibits of highest commercial interest or merit upon the Lake Front, and the agricultural, horticultural, and other departments where vast amounts of territory would be required, at the different parks around the city. This general plan was adopted when the directors reported in favor of the Lake Front and Jackson Park, and the United States commissioners accepted the location. Now, when the directors and the committee on buildings and grounds have asked the city to pass an ordinance giving it control of the city's rights and offering to turn the made ground over to the city for a park at the conclusion of the fair, the ordinance which would have given the directors the right to act and still have protected the city, is loaded down with all sorts of requirements that never could be complied with or accepted by the directors.

Mistaken Idea that the Fair belongs to Chicago.

We do not propose to attempt to dictate a policy regarding the matter, but feel that the members of the board of directors, who are selected from those whom the people hold most honorable and trustworthy, have nothing but empty honor to gain by the greatest success they can achieve, and the entire responsibility of a failure would rest upon them. They have, after careful deliberation as business men, outlined their course of action and asked for permission to proceed. They could not now be blamed if they should take the position that if the entire matter was not speedily settled according to the plan they have arranged and none other, they would resign, and ask congress to recall its action in regard to having a fair. It is beyond our comprehension how, in a patriotic enterprise like this, the small meannesses and petty greed or spite of a few unpatriotic real estate speculators or aldermen can be allowed to block and throttle, at its inception, so grand a project. We will here predict, that after all these avaricious or would-be critical people have grown tired of useless opposition, the fair, if held at all, will be according to the programme laid down, and there will be no realizing of the "Angelus" by the painting being hung where the surroundings it suggests can be seen and smelled. It is too soon to speak of the buildings, except that there will be no competition of any sort, but those architects who have shown decided ability in particular classes of work will be appointed from among the members of the profession throughout the country. Perhaps the main trouble in all this war of cross-purposes is that the Chicago people imagine that the fair belongs to Chicago, while the fact is that, though located here, it belongs as much to every other city.

## A Study of the Hygienic Condition of our Streets.*

DURING the last few months the making of subways for electric wires and the relaying of gas and water pipes have occasioned a very unusual upturning of the streets in this city (New York). This has called forth many popular protests, many complaints that the upturning of so much earth, the liberating of so much bad-smelling gas, and the spreading of so much dust and dirt are injurious to public health. It is the purpose of this paper to discuss the true sanitary influence of this upturning of earth in the streets.

Is it really injurious to public health? If so, in what way does its influence act? There are two ways in which it may be supposed to be injurious:

I. By the liberating of disease-germs which were contained in the soil.

II. By the deleterious effect of disagreeable odors and of dust and dirt which do not contain disease-germs.

Let us consider these two ways in turn.

*First.* If disease-germs exist in the soil they would be scattered with the dust which comes from the upturned soil as it dries, and so would have abundant access to the body. We must, therefore, study the bacterial content of the soil.

Ordinarily there are hundreds of thousands of bacteria in each cubic inch of soil at the surface. This number diminishes below the surface, so that at a depth of eight or ten feet there are hardly any. Just what the life-history of these forms is we do not know; many of them exist in the soil in the form of spores. When placed in nutrient gelatine they grow in great profusion. Most of them are probably harmless when introduced into the human body; but the bacilli of tetanus, typhoid fever, and cholera have been found in the soil.

In order to study these earth bacteria, small measured portions of earth are mixed in sterilized water so as to thoroughly disseminate the particles, nutrient gelatine is then poured over the mixture and the bacteria allowed to grow in it. A little colony of bacteria grows from each bacterium which is capable of developing in this gelatine.

| Number. | Date. | Gaseous Earth. Locality. | Number of bacteria per c.c. |
|---|---|---|---|
| | 1889. | | |
| 1 | Oct. 8 | East Fifty-ninth street near Third avenue.... | 17,675 |
| 2 | Oct. 8 | East Fifty-ninth street near Park avenue..... | 17,950 |
| 3 | Oct. 30 | East Fifty-ninth street near Fifth avenue.... | 157,200 |
| 4 | Oct. 30 | East Fifty-ninth street near Madison avenue. | 131,100 |
| 5 | Nov. 5 | Eighth avenue and Fifty-seventh street..... | 29,700 |
| 6 | Nov. 7 | Tenth avenue and Sixty-fifth street..... | 29,250 |
| 7 | Nov. 12 | Eighth avenue near Fifty-sixth street..... | 8,585 |
| 8 | Nov. 14 | Eighth avenue and Fifty-fifth street..... | 3,800 |
| 9 | Nov. 18 | Fifty-ninth street and Sixth avenue..... | 10,650 |
| 10 | Nov. 20 | Fiftieth street and Eighth avenue... ..... | 287 |
| 11 | Nov. 23 | Sixth avenue near Fifty-eighth street..... | 33,150 |
| 12 | Nov. 26 | Seventh avenue and Fifty-fourth street..... | 15,250 |
| 13 | Nov. 26 | Seventy-first street near Eighth avenue..... | 20,150 |
| 14 | Dec. 2 | Forty-ninth street and Eleventh avenue..... | 21,900 |
| 15 | Dec. 4–5 | Third avenue near Forty-second street..... | 28,850 |
| 16 | Dec. 4–5 | Third avenue near Forty-second street..... | 67,500 |
| | Average..... | | 37,243 |

| Number. | Date. | Non-gaseous Earth. Locality. | Number of bacteria per c.c. |
|---|---|---|---|
| | 1889. | | |
| 1 | Oct. 8 | Seventy-second st. near West End ave., S. side | 43,100 |
| 2 | Oct. 8 | Seventy-second st. near West End ave., N. side | 78,075 |
| 3 | Oct. 30 | Seventy-second st. and Riverside drive..... | 48,450 |
| 4 | Oct. 30 | Tenth ave. near Sixty-second st., middle of st. | 32,200 |
| 5 | Nov. 5 | Fifty-ninth st. near Grand Circle, sidewalk.. | 118,300 |
| 6 | Nov. 7 | Sixty-third st. bet. Tenth and Eleventh aves. | 55,350 |
| 7 | Nov. 12 | Sixty-third st. near Tenth ave..... | 51,300 |
| 8 | Nov. 14 | Sixty-seventh st. bet. Tenth and Eleventh aves. | 22,350 |
| 9 | Nov. 18 | Eleventh ave., sidewalk near Sixty-second st. | 11,850 |
| 10 | Nov. 20 | Open field, Eighth ave. near Fifty-fourth st.. | 13,050 |
| 11 | Nov. 23 | Tenth ave. and Sixty-fifth st..... | 16,800 |
| 12 | Nov. 26 | Sixty-fifth st. near Eleventh ave..... | 9,850 |
| 13 | Nov. 26 | Sixty-fifth st. near Tenth ave..... | 19,400 |
| 14 | Dec. 2 | Park subway, Ninety-seventh st..... | 67,000 |
| 15 | Dec. 4–5 | One Hundred and Sixth st. and Eighth ave.... | 33,250 |
| 16 | Dec. 4–5 | Eighth ave. and 108th st., sidewalk..... | 17,650 |
| | Average... ..... | | 39,873 |

To ascertain the number of bacteria which were in the specimen, we count the colonies.

To ascertain their characteristics, further cultivations must be made, the bacteria must be planted in various culture media and exposed at different temperatures, and they must be inoculated in different kinds of animals.

The labor of separating each variety and studying it thus in detail would be stupendous — it would be somewhat like going into a forest filled with unknown vegetation and attempting to describe all the peculiarities of each group of plants.

Hence bacterial earth examinations have largely been confined to the determination of the number of bacteria, not to the peculiar kinds.

In determining the significance of such examinations we must remember the following facts:

1. The number of bacteria does not necessarily indicate the number of disease-germs. Most of the disease-germs as yet discovered are bacteria, and the study of bacteria as a class bears on the subject of pathogenic bacteria; but pathogenic bacteria do not necessarily exist where the other ones do.

*Charles N. Dowd, M.D., of New York, in *Medical Record* of June 21, 1890.

2. Small specimens of earth may show marked variations in the number of bacteria owing to minor local influences.

3. There may be certain bacteria which are injurious in the body but which do not grow in gelatine, and these, of course, would escape observation.

In order to gain data which apply to the special soil under consideration, I have made a series of comparative bacterial examinations. The ditches which give the strong odor of gas are the ones which the people most fear; they force themselves upon us by the very offensiveness of the odors which come from them and their suggestions of uncleanliness and disease. I have, therefore, compared sixteen specimens of gaseous-smelling earth from these ditches with sixteen similar specimens from ditches far removed from the gas mains, where there was no odor of gas. The conditions have been as nearly identical as possible in all respects, except the presence of the gas. All the specimens were taken from new ditches, and were examined immediately. The two specimens for each comparison were taken at about the same depth, usually twenty-four inches, and were taken on the same day, excepting in Nos. 15 and 16, where one day intervened between the taking of the gaseous and the non-gaseous earth.

The technique was based on that recommended by Fränkel* and Reimers†. In each test $\frac{1}{25}$ c.c. of earth was used. The work was done in the bacterial laboratory of the Alumni Association of the College of Physicians and Surgeons, New York City, with the strict precautions which are necessary in bacterial work. The studies were comparative, and the same technique, in all details, was used for the specimens compared, hence the liability to technical errors was reduced to the minimum.

The records of the earth examinations are given in the above table. All examinations were duplicated for control, but the duplicates corresponded so closely with the others that they are not inserted in the table.

In this table the variations in the individual results is very noticeable. Results of this kind must be expected in bacterial earth examinations, they may be due to differences which only extend through very small portions of earth.

The result of a single examination is, therefore, of little importance. We can only reason from the combined results of a large number of examinations.

The averages, 37,243 and 39,873, are almost exactly the same, so that from these results we cannot argue that there is any difference in the number of bacteria in gaseous and non-gaseous earth.

I isolated and studied several species, but found them the same in gaseous and non-gaseous earth, excepting in one instance, where I found the tetanus bacillus. It was found in non-gaseous earth, and was verified by being carried through six generations by inoculation in mice.

### EFFECT OF PASSING GAS THROUGH EARTH.

To further test the effect of illuminating gas on bacteria, I made another series of experiments by passing it through earth in sterilized cotton-plugged glass tubes, and counting the bacteria before and afterward. To prevent the undue drying of the earth, the gas was first passed through water which was slightly warmed.

The results of these tests may be tabulated as follows:

| | Number of Experiments. I | II | III | IV | V | VI | VII | VIII |
|---|---|---|---|---|---|---|---|---|
| Number of bacteria per c.c. before exposure to gas..... | 55,350 | 51,300 | 22,350 | 11,850 | 13,050 | 9,850 | 19,400 | 6,700 |
| Number of days of exposure to gas..... | 2 | 2 | 1 | 5 | 4 | 6 | 6 | 5 |
| Number of bacteria per c.c. after exposure to gas..... | 19,985 | 33,050 | 162,300 | 5,400 | 7,788 | 12,825 | 70,700 | 32,705 |

As a further control of these results other specimens of the earth used for Nos. III, IV and V were examined after they had lain in cotton-plugged flasks in the laboratory, unexposed to gas, for three, five, and six days, respectively; they gave 17,300, 10,500, 7,300 bacteria per c.c., a diminution in every case.

If we now study these results we find that there was a diminution in the number of bacteria in one-half the cases and an increase in one-half. In one case, No. VIII, where this increase was especially great, the earth was very damp when put in the tube, and in general we think the conditions of heat and moisture had much influence.

There is no evidence that the gas had any influence on the bacteria in the earth in the tubes.

### EFFECT OF GAS-PERMEATED WATER ON TYPHOID BACILLI.

To still further test the action of gas on bacteria, I made a third series of experiments by placing typhoid bacilli in gas-permeated water.

One-half pint of water was sterilized and gas from the city gas system was passed through it one month for series I, II and III, and twenty-two days for series IV. The ingress of bacteria was prevented by sterilized cotton in the tubing. Mixtures of fresh growths of "bacillus typhosus" were then made in water, and their number determined by counting the growths from so much of the mixture as could be withdrawn by one dip of a given fine platinum wire-loop.

Similar quantities of the mixture were then put in the gas water,

*Carl Fränkel: Untersuchungen über das Vorkommen von Mikroganismen in verschiedenen Bodenschichten, Zeitschrift für Hygiene, ii., 1887, S. 521.

†John Reimers: Ueber den Gehalt des Bodens an Bacteria, Zeitschrift für Hygiene, ii., 1889, S. 307.

two c.c. for each. They were left there stated times, and then planted in gelatine and the growths counted. Duplicate estimations were made each time for control. The gas water was planted in gelatine and found to be sterile before it was used.

The results of the four series of observations may be tabulated thus:

TABLE SHOWING THE EFFECT OF GAS-PERMEATED WATER ON TYPHOID BACILLI.

| | Number of Experiments. | | | |
|---|---|---|---|---|
| | I. | II. | III. | IV. |
| Number of bacilli planted | 68,280 | 21,120 | 10,420 | 13,600 |
| Exposed to gaseous water, ½ hour | 32,544 | 18,440 | ..... | 3,280 |
| " " " " 1 " | ..... | ..... | ..... | 1,896 |
| " " " " 2 hours | ..... | ..... | 300 | 21,212 |
| " " " " 3 " | 10,800 | ..... | ..... | 7,990 |
| " " " " 4½ " | ..... | 212 | ..... | ..... |
| " " " " 10½ " | ..... | ..... | ..... | ..... |
| " " " " 24 " | 4,160 | ..... | 2,820 | 848 |

This shows a diminution in bacteria under the action of the gaseous water, but the diminution is not much more marked than shown in water itself in the tests made by Prudden,* M. Meade Bolton,† Wolffhügel and Reidel,‡ Straus and Dubarry.§

If we now compare the results of the three series of observations, we find that they give no reason for believing that the gas has a very marked effect on the bacteria in the soil. The number of observations is not large, and our only available methods of observation leave a large margin of variation; still, so far as they go, they lead us to think that the illuminating gas neither increases nor diminishes the number of bacteria to any marked degree.

Since we find no marked difference in the bacterial content of gaseous and non-gaseous earth, we must consider the effect of upturning the earth without reference to the gas.

So long as the soil is wet it cannot spread the bacteria in the air; but the soil does not long remain wet. It dries beside the ditches, it adheres to the implements, the clothes and boots of the workmen, to the planks and the wagons, and, in fact, to everything which comes in contact with the ditches, and, finally, much of it is left on the surface when the pavement is relaid.

In all these conditions it may be carried away as dust. The bacteria go with the dust, and access to the body is then made easy.

The amount of dust is certainly much increased by these ditches, but, on the other hand, the deeper layers of earth from which this dust comes do not contain nearly so many bacteria as the surface layer.

Grancher and De Champs,‖ in filtering water containing typhoid bacilli through the soil, found no bacilli lower than twenty inches.

Observers have uniformly reported a marked diminution in the number of bacteria in the lower layers, and Reimers found that they were also less vigorous in growth.

Hence, although the ditches must increase the spread of bacteria, this increase cannot be as great as the increase in dust.

Whether they increase malarial disease we do not know, but there is very little malaria reported from people who live in New York. Moreover, it is believed that the organism which causes malaria belongs to a different class from those here considered, and other kinds of experiments would be necessary in studying them.

CONCLUSIONS CONCERNING BACTERIA.

We think that the spread of disease-germs may be increased by this upturning of the streets, but we cannot think that this increase is very dangerous.

*Second.* Let us now consider the second influence which these excavations may have, namely, the reducing the tone of the system by disagreeable odors, and by the spread of dust and dirt not containing disease-germs.

The subject of hygienic surroundings is no less important because it is indefinite. No one will deny that the air is more invigorating and wholesome in a well-selected spot in the Adirondacks than in the crowded streets in the lower part of our city. The crowding of the people together, and the consequent insufficiency of oxygen, the contaminating of the air from the odor of cooking, the tenement-house filth and garbage, and the general uncleanliness, all have their unwholesome effect. They do not necessarily produce active disease, but they debilitate the system. Hun** has recorded and referred to numerous cases where headache, digestive disturbance, and debility, followed exposure to air contaminated from leaky sewers. Both reason and experience teach us to expect such a result. Now the filling the air with the odor of a gaseous ditch is certainly another element in the unwholesomeness of the city. If our houses and places of business were exposed to it for long periods it would be a very serious matter. When we see, for instance, the difference in the course of summer diarrhœa of children here and in the country, we feel that there is good reason for taking all possible precautions against every element which adds to the unwholesomeness of the city. A child who has been debilitated by bad hygienic surroundings has less vigor to resist summer diarrhœa than a child of equally good constitution who has not been so debilitated; if he must remain in these surroundings while suffering from the disease it is still worse. A man whose resisting power is unimpaired can grapple better with any exhausting disease than one who has been debilitated; the severe course of pneumonia in drunkards illustrates this. There are also results of animal experiments which bear on the question.

Charrin and Roger† inoculated with attenuated anthrax virus, eight white rats which had been thoroughly fatigued by running in a rotating cage seven hours a day for four days. They also inoculated four rats in a normal condition. Seven of the tired animals died of anthrax, while all the others survived.

Trudeau‡ inoculated ten rabbits with tubercle bacilli; five of them he turned loose on an island where they were in the open air and were well fed; five he put in a box in a dark cellar and studied them in the amount of food given. At the end of four months four of the rabbits which had been in the open air were killed; they showed no signs of tuberculosis but were remarkably fat and muscular. The fifth one died of tuberculosis one month after inoculation. Four of those in the cellar died of tuberculosis within three months; the fifth was killed after four months; he had far advanced tuberculosis.

These experiments certainly show that the condition and surroundings of animals have an influence on their power of resisting disease. Clinical experience teaches us the same in regard to men. We should, therefore, take all due precaution to shut out debilitating influences. No one of us would wish to have a ditch dug in front of his office, which would fill it with the odor of gas-permeated earth for even a few days; not that it would bring on an attack of typhoid fever or diphtheria or any other severe disease, but it might cause malaise or digestive disturbance of such severity as to add one more element to those which lessen the resisting power of the system, and we may need all our resisting power at any time to throw off disease to which we have been exposed or to carry us through an exhausting illness.

We cannot take the position of alarmists in this matter. We do not expect that ditches in the street will cause an epidemic of any kind. We do, however, believe that the upturning of the streets increases in a moderate degree the liability to disease, both by the spreading of bacteria and by otherwise producing bad sanitary surroundings.

Mr. Stetson tells us, in the May *Scribner's*, that a "safe, clean, and smooth roadway and sidewalk is the right of every citizen." On sanitary grounds we have a right to claim from the city authorities that much care should be taken about allowing the streets to be upturned.

## American and Foreign Structural Steel.

THE following letter to the Chicago *Tribune* is exceedingly interesting, the subject marking a real crisis in present building methods, in view of the enormous increase in the use of structural steel in building. The writer is Architect W. L. B. Jenney:

CHICAGO, June 18.—[Editor of the *Tribune*.]—Please note the clipping from the *Tribune* of yesterday:

"PITTSBURGH, Pa., June 16.—[Special.]—The intelligence that a Belgian firm has offered to supply the structural iron for the new court house at Minneapolis twenty-five per cent cheaper than it can be furnished by Pittsburgh has created a stir among iron and steel manufacturers. The money involved will approximate $300,000, and the importance of such a contract is apparent. E. M. Butz, A. M. Byers, John Chalfant, and Carnegie, Phipps & Co., all of whom are prominent in the trade, express doubts as to the genuineness of the offer. At the Belgian Consulate, however, the offer is declared to have been made in good faith, and the Belgian manufacturers are said to be ready to take the contracts, just as they have similar work at Austin and Houston, Texas. The opinion among the manufacturers here is that if the Belgians can fill the contract, then the tariff on structural iron is too low. Carnegie, Phipps & Co. confess themselves puzzled. They say that the price now for beams is $3.10. The Belgians charged $3.25 for the Austin iron, and since then wages and other items have increased the cost of production in Belgium seventeen per cent. Mr. Byers intimates that there may be some way of evading the straight schedule of duties. Altogether the manufacturers are sorely puzzled."

Also note the conclusion that "tariff on structural iron is too low." Consumers have a different explanation, i.e., "prices of structural iron and steel in the United States are too high, owing to a 'combination' of all the mills that roll beams of the sizes used in buildings."

In the fall of 1888 the "combination" price was reduced for plain beams from $3.30 per one hundred pounds to $2.90 f. o. b. Chicago, which induced owners to allow their architects to use more steel in their buildings, to change from ordinary construction to fireproof, and in general to build in a more substantial and durable manner, to the improvement of our cities. About a year ago the "combination" thought the consumption warranted an advance and put the price up to $3.20, an advance of $6 per ton. As some of our largest Chicago buildings use five thousand tons it increases the cost of such buildings $30,000, which, in the opinion of the consumers, is entirely a "monopoly profit," i. e., just so much over and above a good fair living profit, and so far from wishing to see the tariff increased are delighted to see a possibility, through foreign importations, of forcing the "combination" to put down its prices to about where they would be

*Prudden: On the Germicidal Action of Blood-serum and Other Body Fluids, New York *Medical Record*, January 25, 1890.

†Ueber das Verhalten verschiedener Bacterienarten im Trinkwasser, Zeitschrift für Hygiene, i., 1886.

‡Die Vermehrung der Bacterien im Wasser, Arb. des k. Gesundheitsamt, i., 1886, ref. Archiv. de Méd. exp. et d'Anat. path., i., 1889.

§Recherches sur la durée de la Vie des Microbes pathogenes dans l'Eau, Arch. d. Méd. exp. et d'Anat. path., i., 1889.

‖Recherches sur le Bacille typhique dans le Sol, Archives de Médecine expérimentale et d'Adatomie pathologique, January, 1889.

** Sewer-gas Poisoning, Transactions of the Association of American Physicians, vol. ii., 1887.

† Revue Scientifique, quoted in Boston *Medical and Surgical Journal*, May 8, 1890.

‡ Environment in its Relation to the Progress of Bacterial Invasion in Tuberculosis, Transactions of the American Climatological Association, Philadelphia, 1887.

were the mills in competition instead of in "combination," which is simply another word for a trust or a monopoly. Certainly, we all desire to see the iron and steel interests flourish and increase, to which end they must have a fair profit, but at the same time we wish to make steel fireproof construction the general rule in all our city buildings, and not the exception, to which end the rolled metal must be furnished at a reasonable price, and we hope to see it accomplished through the Belgian importation, believing that the freight and tariff are sufficient to give the United States mills all the advantage they need or should have for the general good.

In support of the belief that American mills can stand a reduction I mention the fact, easily verified, that in Europe, where there is the same competition on beams as on angles and tees, the prices run about in the following proportions: Angles, $1.20; tees, $1.30; beams, $1.25 per one hundred pounds.

In this country, where there is a competition on angles and tees, and where, owing to the "combination," there is none whatever on beams, the proportions are: Angles, $2.10; tees, $2,30; beams, $3.20.

This extra price for beams of $1 per one hundred pounds, or $20 per ton, is due solely to the "combination," and is an extra net profit to the mill owners, as I cannot learn that any part of it goes to the workmen.

So many mills manufacture angles and tees that thus far no "combination" has been possible.

The tariff is now $25 per ton on this material. Were it reduced to $10 beams would be sold at a price fair for both manufacturer and consumer.

There is no fear of Belgian beams being allowed seriously to reduce the consumption of American material, for the "combination" will reduce their price the moment it is its interest to do so.

This is one of the instances where the tariff is too high, and gives birth to a monopoly that is an injury to the entire country, not counting the mill owners, for were beams sold at the same price as other structural iron and steel, and of the possibility there is no doubt, their consumption would be increased largely, hence greater "outputs" of ore and pig iron, the employment of more men at the mines and mills, and all this because then a far greater percentage of the buildings being erected throughout the country would be substantial, permanent structures; advantages so great and numerous that it is scarcely possible to comprehend their magnitude. ARCHITECT.

## The Three Factors in Architecture.*

ARCHITECTURE is a tradition, is a science, and is an art. Inasmuch as it is a tradition, it necessitates a knowledge of the past, where there is an inestimable treasure house for those who have the key. Being a science, it demands that a knowledge of the resources of construction should be at the disposal of an architect as also a knowledge of how to most satisfactorily employ these resources. Finally, since it is an art, architecture belongs to the domain of esthetics, which, however, does not here consist of a purely metaphysical elaboration, but rather of a precise and clear expression of the scientific necessities combined with an artistic sentiment in harmony with modern civilization. We shall, in this paper, examine briefly the first of these three phases of architecture, reserving the two last for the future.

Architecture, by the visible evidence of the growth of the successive styles, forms a link between the civilizations of the past and that of today, although it is a link which has escaped the attention of historians, because architecture is generally ignored by them.

This property of our art of attaching the past to the present by a visible chain, gives it, in addition to the qualities it has, all admit, an importance and a grandeur of character which, it is to be regretted, are not better known and appreciated by the public and especially by our profession. Upon this very fact should be based an argument against fragmentary instruction in the styles of architecture. Instruction limited to the serious study of only one style of architecture hides, not only the unity of the general evolution of our art, which thus ceases to be the constant and faithful reflection of human development in past ages, but also it falsifies to a certain point the style which is being taught. That very style is left isolated like a rock in the midst of human development without any comprehensible beginning or end; instead of itself being, as it is, a living thing developing and growing on lines parallel to man himself.

Each style of architecture being born of the intellectual and moral forces of a human society which seek to work for its profit in its best manner, the constructive resources at its disposal, each style of architecture, I say, has become naturally the expression of a certain civilization, that is to say, of a certain social and religious doctrine and consequently will not serve as an expression of two distinct civilizations. The using again of a style of architecture, or the adoption by one age of a style as its own other than that which it has itself created, is hence in itself a false principle.

This adoption, or renaissance, which can not be more than temporary, is, however, easily explained. At epochs of social transition like our own, or like that at the time of the Roman empire, there exists a conflict between the past which some wish to retain, and the future which others wish to prepare for or enforce before its time. This conflict renders the creation, or even the preservation, of a style impossible, since every style being the expression of an accepted social doctrine presupposes all to have the same general esthetic taste.

At present there is no general agreement as to the social doctrines that should be adopted. The old doctrines are indeed falling into decay, but the new has not yet been entirely formulated, much less generally accepted. Hence there is a struggle between the past and the future, from which for the moment results the impossibility of creating a new style of architecture, or even adopting for the time being any one of the old historic styles.

One can, however, foresee the approach of a new style, and even catch glimpses of its essential characteristics. But, while awaiting its final advent, which must be accomplished by slow steps as society changes from day to day, every architect should search in the practice of his art wherever he believes he can find assistance, whether it be from such and such styles of the past, or whether it be from the departments of science and industry, or whether it be from all these different sources at once, but without other guide for his choice than good common sense, or the absolute requirements of his clients.

We shall come out of this temporary disorder as soon as the social doctrine of the new era shall have been definitely settled. Let no one think that this waiting shall be indefinitely prolonged, for from all quarters we hear the echoes of this incessant work of elaboration. If, then, we do not yet possess this doctrine in its clear and incontestable unity, we at least see plainly the tendencies, and it is these tendencies which the architect ought at this hour to study attentively and do his best to express in his work.

He may then take for the basis of his composition whatever style he will; he is free, but he must also respect the liberty of others. The different schools which formerly represented distinct artistic doctrines, but which are now scarcely more than groups, whose members are united by natural tendencies or habits, ought also to be tolerant toward each other, as all are already respectful toward science and disposed to profit by all the inventions of our improved industries.

Can one not see by these signs of the times, by these numerous points of contact, which already bind the different schools one to another, the approaching unity of all schools of architecture?

They will rally about one science of which all will accept the laws — about one esthetic center, and about one industry, which all shall put to their own profit.

The sun is yet below the horizon but already the clouds reflect the first rays. The rising sun of the new art — I have the firm conviction — will rise in its splendor, before the delighted eyes of our near descendants. I wish to be a prophet for once in my life, although I must here acknowledge that my prophecy is only the logical interpretation of the history of the past and of the observation of the present times.

I hear at this point the voice of some practical reader who cries halt! and who insists upon the fact that ordinarily an architect has to live by his work, and has scarcely the leisure to devote himself to the studies I recommend. He is right, a thousand times right, and it is for this reason that I have demanded, and always shall demand with such insistance, organizations for the *higher studies of architecture*. This would be the formation of a special group of workers devoted to research and the exposition of everything which is of a nature to contribute to our more perfect knowledge of architectural history and of its difficult problems. They should contribute to the progress of science whose forces must be given to the architect, by means of methods calculated to spare his time without, however, allowing him to lose any of the practical utility of these durable aids.

They should also aid in competitions by keeping the requirements always to the highest level of all discoveries as rapidly as they are made public.

They should enlighten the practical workers upon the best organization of workshops, etc.

The higher studies would give the strength of conscious unity to the different efforts made in view of our progress, and they would exercise a valuable influence upon instruction as well as upon all the practical branches of our art.

Its first benefit would certainly be to create unity in the historical studies, and to classify with order the invaluable jewels which are contained in the traditional treasure house of architecture.

The five per cent, my practical friend, is alluring and necessary. I acknowledge it. I even find that its defect is its being often insufficient remuneration for the work performed. But ought we to stop on that account? Do you disdain all progress in art? Are you indifferent to public opinion and, consequently, to what is recognized as grand in architecture, and true merit in architects? Assuredly not. Let us then together all demand the organization of the higher studies in order that the architectural traditions shall be better understood, and the instruction be improved so that work shall be made easier for the practicing architect. Also in order that the public may be as earnestly taught the moral and intellectual importance of architecture as well as its practical utility, so that they may appreciate at least the numerous points which a good architect should possess.

By this means, the country, our profession and art, would have everything to gain, while those who devote themselves to the higher studies, assisted but not bound down in their efforts by an intelligent government, would indeed deserve much from us all, since they consecrate themselves to the difficult task of being the pioneers of architectural progress.

The question of the higher studies has turned us a little from that which at the beginning of this article we wished to examine, and it is time to classify our conclusions as to architectural tradition, as follows:

1. To study the prehistoric architecture as the period of the embryo, which is destined later to develop into the regular style.

2. To study at first separately the special evolution of each style, by showing clearly the action of the three factors which have contributed to its creation, its development, and its decadence. The relations of each style to the civilization which produced it will then be established, and then would be shown its connection with the

*César Daly in *La Semaine des Constructeurs*, July 1, 1890. Translated for THE INLAND ARCHITECT by W. A. Otis, Architect.

social, religious, and artistic doctrines, also with the government. Also the scientific and industrial knowledge of the country and its products, as well as the climate and race under whose influence the style was evolved, will be then indicated.

3. To study afterward all the styles in their historic continuity through the different ages, and in the order of their logical classification, comparing them with each other. To study them with relation to the countries and races until the history of the race is sufficiently well known. To then cause to pass before the eye as completely and faithfully as the science permits, and in a continuous panorama, the evolution of the "humanity architect," from its origin to the present day.

4. Finally, to note the tendencies of progress, which are plainly marked in contemporaneous society, and explain them in the light of these tendencies upon architectural progress. It is thus that upon the majestic pedestal raised by the ancient civilization will be gradually constructed the figure of the new architecture, the symbolic expression of the modern world.

In the future we may examine the two other factors in architecture, i.e., that of science and that of art.

## A City Architect's Office.

SOME years ago a gentleman remarked to an architectural student to whom he had just been introduced, "So you are going to be an architect, and build fine houses for other people and live in a poor one yourself?" It is hoped that a better day has dawned upon the profession and that the young men who, at this season, are leaving the technical schools to begin their life work in architecture, may not have their young enthusiasm dampened by such suggestions of a "poor but honest" career.

The architect of today may rent a "flat," and hence not be responsible for or concerned in the architectural features of his home, therefore we do not propose to discuss the architect's house, but the more prosaic and practical topic, "the architect's office."

The suggestion that an architect's compensation is likely to abound in reputation rather than cash, proves, if it proves anything, that architects underrate the worth of their own services and do not appreciate the added value they give to other people's property. It is also likely that in many cases architects do not appreciate the benefit which they may derive by employing themselves to make a careful plan of their own offices.

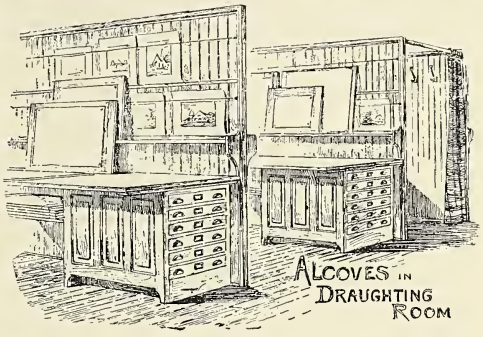
An architect's office is difficult to arrange, for two reasons. First, the business is complicated. There are three distinct sets of people with whom the architect has constant dealings, namely, his clients, the draftsmen and other employés, and the contractors. There must be separate apartments provided for all of these. As practice increases, the office work must be subdivided into several departments; making drawings, writing specifications, keeping accounts, etc., which should




also be provided with separate rooms, so as not to interfere with each other. All these requirements could be met without difficulty if the architect had unlimited means at his disposal, but this brings us to the second difficulty.

The nature of the work requires a large space for drawing tables, consultation rooms, etc., greatly in excess of the area needed by other professions and lines of business in which the gross income is much greater. This forces the architect of moderate means to do one of two things, either have his office in an inferior building, where rent is low, or content himself with cramped quarters in a better building. In the latter case he may accomplish much by a careful arrangement of the space at his disposal.

By the courtesy of Messrs. Patton & Fisher, of this city, we are permitted to illustrate the offices which they have recently fitted up in the Montauk Block. These gentlemen insist that their offices are very unpretentious in size and style and are not in any respect "show rooms." They do admit, however, that they find the arrangement very convenient and think that they have made the most of the northeast corner of the eighth floor. This space was formerly occupied by several law firms. It was necessary to take down some partitions




and move others to change from law to architecture, but the windows, vault and main walls had to be accepted as they were.

As these offices were planned to fit the particular business methods of this firm we can hardly make the various arrangements intelligible without some reference to those methods. The entrance is into the business office, across the center of which is a counter. All business with contractors, and much of that with clients, is transacted across this counter. The bookkeeper, who is also the stenographer, is always in the business office to answer questions and attend to business items. The office boy has his headquarters near the telephone, which is in a glass closet, with doors on each side of counter. In a larger office it is well to have a separate room for contractors, but in most Chicago offices it is the custom for contractors to take the drawings away and figure in the evening. The tables in the outer office accommodate all who wish to figure on the premises. Under each contractor's table is a shelf on which the drawings are kept during the taking of bids.

The superintendent, when in the office, uses one side of the double table marked "Bookkeeper." The private office and studio are separated from the drafting room by a screen seven feet high, the opening in which may be closed by a portière. These two rooms contain a writing desk, two drafting tables and a table exclusively for writing specifications. This arrangement permits the turning from one kind of work to another without loss of time or disarrangement of papers.

At the back of the specification table is a set of light frames, hinged at one end, so as to open after the manner of a book set upright. The drawings for a building are pinned to these frames and spread open before the specification writer.

The drafting room is divided into alcoves by partitions seven feet in height and eight feet long, giving space for two draftsmen in each alcove. There are several advantages of the alcove arrangement over tables in an open office. Conversation with one man does not disturb the whole office, but not the least advantage is that of being able to set one or more drawings against the partition while working on another related to them. The accompanying sketch shows the arrangement with a shelf at the front and back of each alcove, and also rabbeted strips to hold photographs and sketches. A wire stretched above each strip holds the top of the paper in place. The rolls of paper for detail work are mounted in a rack at the end of the detail table. At the end of the drafting room the wall is covered with matched flooring, to serve as a sort of vertical detail table for sketching and inspecting such details as need to be seen in upright position.

If an architect would economize space and save rent he must store his drawings and stationery underneath the drawing table and not build separate cases, and the drawings and cupboards should be arranged so that the draftsman working at the table will not be disturbed when they are opened. The sketch of the alcoves shows how Messrs. Patton & Fisher have placed a case of drawers under the outer end of each alcove table and have made a shelf for drawing boards under the inner end. The drawers under the tables that stand free open from the back.

It has been the aim, in arranging this office, to keep each article as near as possible to the place where it is to be used. The location of the vault would be inconvenient for the storage of drawings were it not for the system adopted of retaining in the office two sets of plans of each building. The "record" copy is kept in the vault. It is the copy signed by the contractors and kept for permanent reference. The "office" copy is kept in a drawer in the drafting room and remains in a convenient place for use until the building is complete. In similar manner the office copies of the specifications are kept in the bookkeeper's desk during the day and put in the vault at night. The office copy is never allowed to be taken from the office, but the

superintendent has a special copy which he keeps in a drawer in the back of the counter. Other drawers in the counter are for holding specifications before the contracts are let.

All sketches and photographs that are expected to impress clients are kept in the reception room. All printed blanks and general stationery are within the reach of the stenographer. All catalogues and practical books are in the specification department, while photographs and plates are in the drafting room, convenient to all the draftsmen. All preliminary studies are kept in drawers in the studio. After the sketches are accepted they are transferred to the drafting room and the foreman takes charge of them and the working drawings.

The private office and studio are intended to be workrooms for the firm and such employés as may be under their immediate supervision, but they are also available as consultation rooms for clients when the reception room is already occupied.

## Convention of the National Association of Master Plumbers.

THE National Association of Master Plumbers of the United States opened its eighth annual convention in the Chamber of Commerce building, Denver, Colorado, at 2 o'clock P.M., Tuesday, June 17. President Hannan called the convention to order, and addresses of welcome were made by M. A. Dolan, president of the Denver Association of Plumbers, and Wolf Londoner, the mayor.

President Hannan responded in a few words, and announced that the first business in order was the appointment of a Committee on Credentials.

On motion of William Harkness, Jr., of Philadelphia, the chair appointed as such committee, William Harkness, Jr., of Philadelphia; James Foley, of Kansas, and Dan Shannon, of Boston, who, with Secretary Green and Secretary Sheehan, as such committee should examine and report on the credentials of the delegates.

The Committee on Credentials submitted the following report:

Your Committee on Credentials present the following as their report: Number of states represented, 19; number of cities represented, 37; number of delegates as per credentials, 180; and we herewith attach a list of delegates.

Respectfully submitted,
WILLIAM HARKNESS, Jr., Chairman.
JAMES FOLEY.
DANIEL SHANNON.

Baltimore, Md.—P. T. Barry, James Healy, William Drusnett, John Trainor, W. W. Rowles, Joseph C. Mitchell.
Bloomington, Ill.—Robert Landen.
Boston, Mass.—I. J. Tute, William Lamb, Daniel G. Finnerty, Daniel Shannon, W. H. French, Henry W. Toombs, D. A. Hogan, Joseph H. Bagley, David Smith, J. F. Cronin, W. H. Mitchell, William McKenna.
Bridgeport, Conn.—H. B. Middlebrooks, Alfred Hopkins, L. H. Mills.
Brooklyn, N. Y.—George B. Lewis, William Fallon, George Cummings, H. H. Noble, T. W. Kelly, M. J. Lyons, Thomas Hudson, William J. Fitzpatrick, Theodore Radcliffe, John J. Keenan, Paul Ayres.
Buffalo, N. Y.—L. P. Beyer, Charles Geiger, Fred Yuhl, C. H. Carey, Jacob Mensch.
Burlington, Iowa.—Henry Ewinger.
Chicago, Ill.—H. Watt, R. Griffith, D. Whiteford, J. H. DeVeney, M. H. Reilly, C. J. Herbert, H. J. Kilrain, William Bowden, J. H. Roche, J. R. Alcock, C. J. Byrnes, C. C. Breyer, D. J. Rock, A. Young, T. F. Gay, J. J. Hamblin, J. G. Weber.
Cincinnati, Ohio.—John A. Douglas, W. F. Wagner, Richard Murphy.
Cleveland, Ohio.—C. C. Dewstoe, W. A. Kelley, J. Schneeberger.
Colorado Springs, Colo.—E. S. Bunstead.
Columbus, Ohio.—E. A. Futerer, C. A. Klie.
Decatur, Ill.—Philip Mueller.
Des Moines, Iowa.—Joseph Laing, John Burnside.
Duluth, Minn.—W. H. Dwyer.
Davenport, Iowa.—James Cameron.
Denver, Colo.—N. A. Dolan, W. H. McCarthy, W. F. Brane, Daniel F. Frey, W. F. McCarthy, James Shannon.
Glenwood Springs, Colo.—Joseph A. J. Clouden.
Hornsburg, Pa.—John A. Kromer.
Indianapolis, Ind.—John S. Farrell, Peter J. Gall.
Kansas City, Mo.—L. B. Cross, Alexander Gray, H. B. Farley, Dell Guay, R. B. Farley.
Kansas State Association.—James Foley, S. J. Stewart, Thomas Lloyd, C. J. Prescott, R. Wood.
Lowell, Mass.—Thomas Costillo.
Leadville, Colo.—C. N. Priddy.
Minneapolis, Minn.—E. C. Couvet, A. W. Scott.
Milwaukee, Wis.—Charles Poleshek, W. E. Goodman, Herman Appell.
Nebraska State Association.—J. H. O'Neill, M. A. Free, N. B. Hussey.
New York City.—Joseph A. Macdonald, George D. Scott, J. N. Knight, William R. Brocken, H. G. Gabay, William P. Austin, F. Sullivan, James Gilroy, D. Mackay, Jr., I. J. Toumey, C. Fraser, P. J. Cummings, Frank Reynolds, William Young, E. J. Brady, W. H. Quick, J. W. O'Brien, D. W. Littell, George B. Brown, Philip Smith.
Philadelphia, Pa.—John E. Evanson, William Harkness, Jr., Enoch Remick, William W. Wright, W. H. Doyle, F. P. Brown, J. J. Weaver, George F. Uber, A. G. Bond, William McCoach.
Portland, Ore.—I. J. Johnson, J. J. Owens, Alexander Muirhead.
Pueblo, Colo.—E. P. Fish, C. Geiser.
Pittsburgh, Pa.—J. J. Kennedy, B. F. Call, James McGinness, Frank McKnight, Leo McShane, Allen McFadden, George Sands.
Rochester, N. Y.—J. H. Howe, William Barr, I. W. Ford, W. G. Reid.
Sioux City, Iowa.—D. W. Fitts, John F. Gearen.
Springfield, Mo.—W. W. Cronin, Harry Cooper.
St. Louis, Mo.—F. Abel, J. Sheehan, Joseph Funalty, William H. Graham, Joseph P. Gallagher, David Roden, Thomas Cantwell, Samuel S. Doony, Edward P. Kearden, P. C. Ring, M. J. Ward, Joseph A. Stedger, William Morris, James A. Lynch.
St. Paul, Minn.—J. J. Dunnigan, J. P. Adamson, P. W. Hudner.
St. Joseph, Mo.—R. F. Connell, M. E. Herbert.
Syracuse, N. Y.—R. C. Maclure, Edward Jay, Alfred Tilley.
Salt Lake, Utah.—J. J. Farrell, H. C. James.
Washington, D. C.—James Kogan, Edward J. Hannan, George A. Green, Joseph Lockhead, George Hutchins.
Wilmington, Del.—Alfred Gawthrop, Thomas Reilly.

The report of the Committee on Credentials was adopted.

W. H. McCarthy, of Denver, was appointed sergeant-at-arms, and Henry G. Gabay, of New York, was appointed assistant secretary.

George Sands, Pittsburgh; Henry W. Toombs, Boston, and Peter J. Gall, Indianapolis, were appointed Auditing Committee.

The convention then adjourned to 9 o'clock Wednesday morning.

In the evening a ball was given at the Chamber of Commerce in honor of the delegates and their ladies.

The convention was called to order at 9 o'clock Wednesday morning, and, in the absence of Secretary Green, W. H. Mitchell was chosen secretary pro tem.

The report of the Essay Committee, A. W. Murray, of Chicago, chairman, was read.

It included fifteen subjects, assigned to the associations of fifteen cities represented in the convention. The report of the Apprenticeship Committee was presented by W. H. Graham, chairman. It narrated a case wherein an apprentice in St. Louis had violated an agreement, and gave a history of the action of the courts in the matter. The lesson learned is to take no apprentice unless properly protected by papers. After an interesting discussion it was adopted.

The reports of the state vice-presidents were read and adopted, after which the convention adjourned to 1:30 P.M.

The first business in order at the afternoon session being the president's address, Mr. Hannan delivered the following:

GENTLEMEN,—It now becomes my pleasant duty to render an account of my stewardship for the past year. I am happy to inform you that a misunderstanding which existed between a manufacturer and one of our local associations when I was elected has been investigated by a committee of three state vice-presidents appointed by me. After receiving their report, which unanimously sustained our members, the case was amicably settled. Entire harmony prevails between the better class of manufacturers and dealers and the trade. Where there are any violations of our protective resolutions they are on the part of the small, mean tricksters, who are compelled to resort to all manner of devices to secure trade. They are engaged in an illegitimate pursuit, pretending to do a wholesale business while, in reality, they are retailing. I must confess that in a great many cases the plumber is to blame, for such dealers could not exist long if they depended on their illegitimate trade. Names of those so engaged and details will be given in executive session.

It cannot be denied that to a certain extent we have continued to carry out the objects for which we organize; our special objects being for sanitary, commercial and social purposes. The states and cities having sanitary laws are about equal to the number of associations represented here today, which is proof that we have attained the object for which we are banded together, as far as the sanitary feature is concerned. The sanitary laws which are in effect, as well as the vast improvement in the class of work being done at the present time, have been secured through the efforts of our members.

Need I say anything about the social feature? The banquets, balls, excursions and picnics of the past year, which have served to bring our members together, speak for themselves.

We should now turn our attention to the commercial feature, for we have not improved financially in proportion to our advancement in other directions. This is due to the fact that in every community unscrupulous men, who, without mechanical skill or technical ability, are conducting a business and come into competition with respectable, intelligent members of the craft. They receive all the advantages of trade discounts and the benefits of organization, although not affiliated with any association for protective measures. The remedy seems to be found in urging the passage of state sanitary laws to prevent any but competent persons from engaging in the business.

Thanks are due Col. Richard Auchmuty for inaugurating trade schools, for they are doing an excellent work throughout the country, and they should continue to receive the indorsement of every good and patriotic citizen. Educating the young men, technically and practically, will solve the question of competency.

During the year I traveled about 7,800 miles in the interest of our association. I visited Milwaukee, St. Paul, Minneapolis, Sioux City, Omaha, Chicago, New York, Albany, Rochester and Buffalo. The increase in membership here today furnishes a proof as to whether the time and money were well spent. The receptions given and the treatment received on those occasions more than paid me for the time spent in the interests of our association.

While in Chicago I had the pleasure of meeting the Hon. De Witt C. Cregier, mayor of the city, and extended to him the thanks of this association, as passed by vote at the last convention, for appointing our honored ex-president, Andrew Young, to the position of Chief Sanitary Inspector for Chicago. By so doing he honored our trade and proved our argument that practical men should be appointed on all health boards and as inspectors.

During the year we have organized and received into the national association eight associations, as follows: Memphis, Tenn.; Duluth, Minn.; Indianapolis, Ind.; Watertown, N. Y.; Birmingham, Ala.; Erie, Pa.; La Crosse, Wis., and Salt Lake City, Utah. In addition, we have received individual members as follows: Texarkana, Ark.; Jacksonville, Fla.; Fargo, N. D.; Barre, Vt.; Portsmouth, N. H., and Huron, S. D. By referring to the secretary's report, it will be seen that our membership has increased each year.

The plan of employing an executive clerk I found to be an excellent one, for by so doing I was enabled to answer all correspondence promptly, as well as to send out personal letters to gentlemen in our business who were not members, urging them to organize. If I did not succeed in all cases in getting them to organize and unite with us, I think I have sown seed which may take root and grow under a future administration.

I would urge upon all associations in affiliation with the national association the necessity of living up to our constitution and by-laws, and platform of principles, as adopted at Pittsburgh.

The success of and good example set by our association, has been followed by all the building trades in organizing associations, and the forming of Builders' Exchanges. But we must not let them excel us; neither can they take the place of our organization. I would recommend that our local associations in cities where they have no state governing plumbing, continue to agitate the question until such laws are enacted; not only for the benefits which they will derive from such legislation, but for the good of the public health.

I know it would be a great tax for my successor to visit our local associations, but much good can be accomplished by a personal visit, especially where differences exist. A visit to the localities which are unorganized would be productive of better results than a correspondence.

The national association is not an organization separate from the individual societies—it is an amalgamation of them all. Its direct object is to build up and strengthen every association which enjoys its membership, thereby strengthening itself. New York State by herself would be a small and insignificant nation. Rhode Island would be of less importance still, but as parts of the great American commonwealth each obtains a new power and majesty and acquires a voice in deciding the destinies of the world.

It is very important to know at all times who our members are, and when we receive new ones or any drop out it should be made known either through the trade papers or by circular.

There are a few traitors in our camp who must be sought out and driven from the ranks when found. The time has come when the executive committee should be empowered to weed out all such, and to take away the certificate of membership from any association violating our constitution or rules.

I congratulate all the local associations on their progress during the past year. It seems as though all had adopted the motto "Excelsior." I wish to thank the officers of the several associations for their promptness in answering all communications, and their willingness to coöperate with me in advancing the good work of our organization. I also tender my heartfelt thanks to the trade press for the assistance rendered by the willingness to publish all matters of importance.

In conclusion, I desire to thank my colleagues of the Executive Committee for the good advice and assistance rendered me during the year, the successful termination of which has been due to the good will manifested at all times; and I bespeak for my successor that same good will and coöperation on the part of all, in order that his administration may be as successful and his relations as pleasant as mine have been.

Secretary George A. Green presented his annual report, which included in new membership, from Memphis, twelve; Duluth, seven;

Indianapolis, sixteen; Watertown, N. Y., eight; Erie, eight; La Crosse, four; Birmingham, six; Salt Lake City, ten; Jacksonville, Fla., one; Texarkana, one; Fargo, one; Barre, Vt., one; Portsmouth, two; Huron, S. D., one; Bridgeport, Conn., seventy-eight; Colorado Springs, three; Glenwood Springs, Colo., one; Leadville, one; Minneapolis, twenty-five; Pueblo, three; a total of one hundred and twelve new members.

Andrew Young, of Chicago, made a report as delegate to the convention of the American Public Health Association at Brooklyn, after which the convention went into executive session and adjourned to 9 P.M., when the evening was devoted to the reading of papers.

State Vice-President J. R. Alcock, of Chicago, introduced the following resolution, which was adopted:

That this national body appoint each association in the United States a day of exhibit at the World's Fair, the State Committee to commence action at once, said association in each state to be controlled by a chairman, who shall be appointed at this convention, and who shall direct the display, the state chairman to be the state vice-president.

The convention then adjourned until 2:30 o'clock in the afternoon.

The election of officers was the first business of this session, and Messrs. Hogan Pollasheck, Tumly, Noble and Fitts were appointed tellers.

On motion of Mr. Gabay, of New York, seconded by Mr. Murphy, of Cincinnati, and Mr. Finnerty, of Boston, Robert Griffith, of Chicago, was unanimously chosen as president of the association for the ensuing year.

For vice-president, Jeremiah Sheehan, of St. Louis, and Joseph A. McDonald, of New York, were nominated. A ballot gave McDonald 105, Sheehan 53, Mitchell 1 and Hussey 1, and Mr. McDonald was declared elected.

For treasurer, Mortimer J. Lyons, of Brooklyn, and W. F. McCarthy, of Denver, were nominated, and the ballot gave Lyons 81 and McCarthy 70, and Mr. Lyons was declared elected.

J. R. Alcock was nominated by President Griffith and unanimously elected as secretary.

J. J. Hamblin, of Chicago, was elected financial secretary.

W. F. McCarthy, of Denver; William Mitchell, of Boston; N. D. Hussey, of Omaha; W. G. Reed, of Rochester; L. B. Cross, of Kansas City, were chosen Executive Committee.

The following state vice-presidents were then chosen:

Colorado—M. A. Dolan, Denver.
Connecticut—L. B. Mills, Bridgeport.
District of Columbia—James Lockhead.
Delaware—Alfred Gawthrop, Wilmington.
Florida—William Clark, Jacksonville.
Illinois—David Whiteford, Chicago.
Indiana—J. Madden, Fort Wayne.
Iowa—William Ellomund, Sioux City.
Kansas—Thomas Lloyd, Kansas City.
Kentucky—Simon Shulhafer, Louisville.
Maryland—William Drummett, Baltimore.
Michigan—Edward Sterner, Flint.
Minnesota—S. H. Rothwell, Duluth.
Missouri—David M. Quay, Kansas City.
Maine—G. L. Learned, Waterville.
Massachusetts—Daniel Shannon, Boston.
Nebraska—James H. O'Neill, Lincoln.
New Jersey—J. F. Blackshaw, Jersey City.
New York—Martin Fallon, Brooklyn.
Ohio—Richard Murphy, Cincinnati.
Oregon—J. J. Owens, Portland.
Pennsylvania—B. F. Call, Pittsburgh.
Rhode Island—W. L. Whipple, Providence.
South Carolina—R. L. Long, Charleston.
Tennessee—T. J. Mooney, Nashville.
Texas—George W. Kite, Fort Worth.
Virginia—W. E. Foster, Norfolk.
Vermont—P. L. Lyons, Montpelier.
Wisconsin—E. T. Doyn, Milwaukee.
Utah—J. J. Farrell, Salt Lake.

Cincinnati was chosen as the place for holding the next national convention.

## Texas State Association of Architects.

After the address by President Wahrenberger at the annual meeting of the association, as given in THE INLAND ARCHITECT for June, a vote of thanks moved, by ex-President Kane and seconded by Geo. E. Dickey was passed.

Mr. Dickey also moved that copies of the address be forwarded to THE INLAND ARCHITECT, *American Architect, Southern Architect, North-Western Architect,* and other interested papers, and that the full address be inserted in the Dallas daily papers. Adopted.

J. J. Kane moved that a committee of two, consisting of S. B. Haggart and G. M. Tozer, be appointed to draft a form of "order of business" so that the committee might report in proper order, and thus facilitate the carrying out of business during the session. Unanimously adopted.

It was moved that the president appoint a committee of three members to offer names for officers for the ensuing year. Carried.

The president appointed the following as the committee: G. M. Tozer, Frank W. Kane and Geo. E. Dickey.

Frank W. Kane proposed that a committee consisting of M. McQuirk and S. B. Haggart be appointed to formulate rules under which architects will take part in competitive work and present same at next annual meeting. Seconded by N. Tobey and unanimously adopted.

This was a motion similar to one adopted at the last annual meeting, but the committee failing to come together nothing was done; therefore action is deferred for several months.

A motion to adjourn until 2 o'clock P M. prevailed.

WEDNESDAY AFTERNOON SESSION.

The convention was called to order at 2:10 P.M. by the president.

The committee on order of business presented their report, which, after being amended, read as follows:

*To the Honorable President and Members of the Texas Association of Architects:*

GENTLEMEN,—We, your committee, hereby respectfully submit the following order of business:

1. Reading the minutes of the previous annual meeting.
2. Reading president's address.
3. Report of Executive Committee.
4. Report of Standing Committee.
5. Report of Special Committee.
6. Unfinished business.
7. New business.
8. Payment of annual dues.
9. Election of officers.
10. Appointment of Standing and Special Committees.

Respectfully submitted, S. B. HAGGART.
G. M. TOZER.

On motion of Frank Kane, seconded by M. McQuirk, the "order of business" as read was unanimously adopted.

Letters were read from Treasurer Eugene T. Heiner and George E. King, and ordered to be filed.

The minutes of the San Antonio meeting were read and approved.

The financial statements of Secretary W. W. Larmour and Treasurer Eugene T. Heiner were read and, after discussion, adopted.

The Executive Committee presented their report:

*To the President and Members of the Texas State Association of Architects:*

GENTLEMEN,—The Executive Committee beg leave to report that they have examined the statements of Secretary Larmour and Treasurer Heiner for the year 1889, but as they are unaccompanied by the books or vouchers, and neither of the above officers being present, prevents our making a full statement.

The receipts show for annual dues and balance from last year..$95.00
Disbursements.. ..... 74.15

Leaving a balance on hand of.....$20.85

Owing to a great many of the members being behind in their dues, we beg to submit the following motion, which the secretary has been instructed to send to each delinquent member: That any member who is in arrears for dues for the year 1889, or previous years, be notified that unless the same are paid within thirty days from the date of notice, he will stand suspended on resolution of the Executive Committee.

The resignation of W. C. Dodson, of Waco, was received and accepted at San Antonio.

Four members were suspended for non-payment of dues.

The following were elected members of the Association: Alfred Muller, of Galveston; P. S. Rabitt, of Galveston; S. B. Haggart, of Fort Worth; M. R. Sanguinet, of Fort Worth.

More marked activity and interest on the part of members will result in much good. J. J. KANE, *Chairman.*

Moved by Nathaniel Tobey, seconded by M. McQuirk, that the report of the Executive Committee be adopted. Carried.

Moved by S. B. Haggart, seconded by George E. Dickey, that the association adopt an appropriate bronze or silver badge; each member to procure and wear same, and that the president appoint a committee to design and have struck off about twenty badges. The members to purchase their badges and not to make it a charge against the association.

The president signified his approval of the badge and appointed S. B. Haggart and F. W. Kane on this committee.

Moved by George E. Dickey that 250 copies of the report of the proceedings be procured and distributed by the secretary to the members; and that $20, or so much as is required, be appropriated for cost of publication. Carried.

The Committee on Nomination presented their report:

GENTLEMEN,—We, your Committee on Nomination of Officers for the ensuing year, beg leave to submit for your consideration the following named officers: President, James Wahrenberger; vice-president, Nathaniel Tobey; second vice-president, George E. Dickey; Executive Committee, J. J. Kane, chairman, M. McQuirk, S. B. Haggart, W. W. Larmour, J. Larmour; treasurer, G. M. Tozer; secretary, George W. Stewart.

The report of the committee was adopted, and the secretary authorized to cast a ballot in compliance with the report as the unanimous choice of the convention. Number of votes cast, ten.

The roll of membership is as follows: A. B. Bristol, Dallas; Alfred F. Beckmann, San Antonio; Geo. E. Dickey, Houston; J. Riley Gordon, San Antonio; Alfred Giles, San Antonio; S. B. Haggart, Fort Worth; Eugene T. Heiner, Houston; Sam P. Herbert, Waco; Frank W. Kane, Fort Worth; Geo. S. Kane, Fort Worth; J. J. Kane, Fort Worth; Geo. E. King, El Paso; J. Larmour, Austin; W. W. Larmour, Waco; Burt McDonald, Austin; M. McQuirk, Dallas; Alfred Muller, Galveston; P. S. Rabitt, Galveston; Oscar Ruffini, San Angelo; R. M. Sanguinet, Fort Worth; Geo. W. Stewart, Dallas; Nathaniel Tobey, Dallas; Guy M. Tozer, Dallas; W. H. Tyndall, Galveston; Albert Ullrich, Dallas; James Wahrenberger, San Antonio; A. O. Watson, Austin.

Geo. E. Dickey proposed Houston and G. M. Tozer proposed Fort Worth as the places for holding the next convention. Considerable rivalry existed between the two cities, and on the third ballot Fort Worth was selected as the place of the next meeting.

On motion the convention adjourned to meet in Fort Worth on the third Tuesday in January, 1891.

THE plumbing material business has suffered a great loss through the recent fire at the Plumbers' Metal Works of the city of Philadelphia, and we sympathize with their energetic proprietor, Mr. C. A. Blessing, in his misfortune. The fire, which occurred on the morning of July 4, partially destroyed the works, and caused a temporary suspension of the business; but we learn that in a very short time the principal departments will be running full again, and their many patrons receiving their requirements as promptly as before. We understand from Mr. Blessing that it is his intention to open a very fine exhibit of modern plumbing and sanitary goods at his new stores, No. 625 Arch street, Philadelphia, which it is his intention to make a credit to Philadelphia enterprise and an educator of the general public to better and more advanced ideas of the general sanitation of their homes.

## Association Notes.

EDINBURGH ARCHITECTURAL ASSOCIATION.

The annual excursion of this party took place on May 30, when thirty members left for Dunfermline under the leadership of Mr. Russell Walker. A visit was paid to Pitreavie House, and Mr. Henry Beveridge of Pitreavie gave a historical sketch of the mansion house. Pitreavie House dates from the earlier decades of the seventeenth century, and was erected in its original form, either by Sir Henry Wardlaw, chamberlain to Anne of Denmark, Queen of James VI, or more probably by his son of the same name, created baronet by Charles I in 1631. The initials S. H. W. (Sir Henry Wardlaw) appear in the triangular panels over the old doorways of the north wings (one of which may be seen *in situ*, while the other now gives access to the garden) and the same initials appear again on the sundial, accompanied by the date 1644, the only inscribed date found in connection with the buildings. The Wardlaw arms occupy a panel on the north front, bearing also the motto "*Familias firmat pietas*," which belongs to that family. The walls of the house as originally built were some two feet lower than at present, and the gables somewhat more acute and finished with crowsteps, while the roof was broken at the eaves by dormer windows, one of whose tympana is still to be seen over the old archway which now spans the carriage way. The house was considerably altered both in its internal arrangements and its outward aspect at some period unknown, probably in the early years of last century, when it passed out of the hands of the Wardlaw family and became the property of Sir Peter Blackwood, Lord Provost of Edinburgh. The height of the wall was then raised to its present level, which had the effect of including the dormer windows under the main roof, an alteration by no means an improvement, but no doubt in keeping with the spirit of the age, while at the same time the crowsteps of the gables gave place to the present molded skews. The old house of Pitreavie is not destitute of historical interest. The ground immediately surrounding the house, and the valley and higher ground extending eastward till it reaches the Great North Road which runs from Queensferry to Perth and on to Inverness, was the scene of the decisive battle of Inverkeithing, or Pitreavie, fought in 1651. This engagement which was fought between the troopers of Cromwell under Overton and Lambert and the supporters of Charles II under Holbourne and Browne, resulted in the total defeat of the king's men, and placed the affairs of the young king in Scotland in an almost hopeless condition. The fugitives from the battle rallied themselves, it is said, under the walls of Pitreavie House whose inmates were pledged to the royalist cause, but who, seeing the fortune of the field, now took part with the victors and assailed their defeated friends. It is an old saying of the country that after this act of treachery the Wardlaw family speedily declined and "fell awa like snaw aff a dyke." It may also be mentioned that Pitreavie House was the residence during her early married life of Elizabeth Halket, wife of Sir Henry Wardlaw, the third Baronet of Pitreavie, a lady famous as the discoverer or as seems more probable the authoress of "Hardi Knute," a ballad fragment well known and deservedly admired.

CHICAGO ARCHITECTURAL SKETCH CLUB.

An informal meeting of the club was held May 26, the occasion being a reception tendered Architect Harry Lawrie, of Omaha, and Oscar Enders, of St. Louis, members of the club. Other guests were Frank Enders, the artist, of Milwaukee; B. H. Brown and A. Ambrose, of Chicago; W. B. Ittner and G. Loenholdt, of St. Louis. The meeting was a protracted one, and creditable to the entertaining ability of the club members.

That part of the report of the adjudicating committee upon sketch club competitions, referring to the three subjects illustrated in this number, and which will be read with considerable interest in connection with the drawings, is as follows:

CHICAGO ARCHITECTURAL SKETCH CLUB COMPETITION, May 5, 1890.

Subject.—Artist's Home by the Sea, with interior sketch of studio. Rendered in sepia. Interior sketch may be in brown ink.

Note.—Designs that do not follow the programme are discarded from the competition.

1. "Cliff" (W. B. Mundie).—Well drawn; perspective view from the land side very good, and superior to the view from the water; outside entrance to the studio ingenious and convenient; studio, simple and good, without being in any wise remarkable. Plan shows an oversight in library—the floor would seem to be on a level with the stair landing, and also on a level with adjacent room and the hall. A better entrance to the library should be devised. Toilet room too large, kitchen too small, no closet or wash room conveniences for the studio.

2. "Cheek" (T. O. Fraenkel).—Design simple and good. (A house that an artist might build.) This design complies more nearly with the requirements than any other presented.

3. "Lochiel" (C. B. Schaefer).—Drawing of studio very effective and of admirable simplicity. The studio too small for so large a house. Water side of house good; the drawing fair; the rendering rather hard. A studio in second story not thought desirable in a house by the sea.

This competition as a whole shows care and study and a desire on the part of a considerable number of members to do the best they were able in the odd moments they could find for the work.

Some of the designs are of decided merit as preliminary studies, though we believe some of the larger houses to be far more extensive than was contemplated, and not what is generally understood by the subject, "An Artist's Home by the Sea."

W. L. B. Jenney.
J. L. Silsbee.

Mr. J. W. Root of the adjudicating committee was out of town and sent the competition report in without inspecting the drawings, hence the absence of his signature to the report.

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Our contemporary *House Painting and Decorating* is obtaining signatures to a petition to congress asking that a law may be enacted making the manufacture and sale of adulterated paints, linseed oil and white lead illegal and punishable by fine or imprisonment. All persons who believe that such a law should be made are invited to send their names to the editor.

## The Emperor William Monument Competition.

The competition for a monument to the late Emperor William, of Germany, was decided by the expert jury in favor of Herr Bruno Schmitz, well known in this country as the successful architect in the Indiana soldiers' and sailors' monument competition. Regarding the decision the London *Builder* says:

"The competition for a 'Soldier's Monument to the deceased Emperor William,' to be placed on the summit of the historical Kyffhäuser, has been decided this week, and we again find the talented 'monument specialist,' Herr Bruno Schmitz, the winner of the first prize, this time with a medieval tower-shaped erection, placed on a scheme of terraces, and brought into connection with an equestrian statue of the monarch who is to be memorialized, together with a legendary representation of King Frederic Barbarossa sitting in an open niche. Although very fair prizes were offered, this competition was by no means of a high standard; of the twenty-eight designs sent in some showed most wretched work, both in composition and technique, and one or two (especially design No. 4) might have been thought to have emanated from a lunatic asylum. The designs classed second and third are both based on a similar idea to that of the first one, and the outward resemblance of these three pieces of work will be sure to strike most visitors. A characteristic incident in connection with the competition is that the young emperor, on June 24, visited the hall in which the competition designs had been placed for inspection by the jury, and that, after spending some time in examining the models and drawings, he called the members of the jury together and gave these gentlemen his ideas on the subject, going so far as to even mention those designs which, according to his view, alone merited consideration. As in Germany it is still pretty well the case that the emperor's word is law,—people may grumble, but they do not run counter to edicts from high places,—it may be imagined how far the jury were likely to be unfettered in their choice. We may certainly congratulate ourselves that we are emancipated from this kind of thing in England."

While the influence of the young emperor's preference may have had weight with the judges, it was in favor of the design and not because of partiality to Mr. Schmitz, and its effect at most can only be inimical to good design, though even in this it is fair to suppose the emperor is not uneducated in art and his influence was probably thrown in favor of the design that would best commemorate the life and works of his grandfather, the great William, and best suit the patriotic as well as the art taste of his people. We send our congratulations to our friend, Herr Schmitz, who has proved himself great in his art, not only in his own country, where a suggestion of royal favor may be made, but in the United States, where the best architects of the country and an intense feeling for American art and artists were in competition against him. These facts and the thorough honesty and critical art knowledge of the jury that gave the award to a foreign design made Herr Schmitz's victory in the Indiana competition all the more signal.

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## Correspondence.

Office of Chicago Gas Light & Coke Company,
Chicago, May 10, 1890.

*Editors Inland Architect:*

We desire to call your attention, and, through you, the attention of owners, to the advisability of making provision for two independent systems of pipe, one for fuel, and the other for illuminating purposes, *during the erection of new buildings.*

Since March 1, 1890, gas used for fuel purposes, where supplied through a separate system of piping and separate meter, has been sold at $1 net per 1,000 cubic feet, a reduction of 25 cents per 1,000 from past prices. In order to obtain the benefit of this reduction, a large number of our consumers have gone to the expense of refitting their houses and places of business with separate pipes.

When the immense advantages derived from the use of gas are taken into account, the additional cost of introducing these pipes *when the building is being constructed* is but a trifling consideration.

As to the advantages of gas for fuel, it is a fact, easily proven, that a gas range will do the cooking the year round for fifty per cent less than a coal range, to say nothing of the comfort, the saving of time and labor, and the avoidance of wear and tear, dirt, etc.

In large apartment buildings, the saving on janitor's wages alone will soon offset the original outlay for piping and appliances, while the expense of painting, papering and general interior decorations, will be greatly reduced by the doing away with the coal dust, smoke and ashes. Buildings fitted with the latest improvements for gas using will rent better and quicker, and will in every way be a *much better investment for the owner* than those constructed with a view of using coal for fuel.

In all buildings erected for residence purposes, gas pipes should be extended to every room, so that heating apparatus could be put in at the tenant's will. In kitchens and laundries, piping should be carried to a point near the chimney, to provide for the cooking range and hot water boiler. The bathroom should be supplied, to provide for the use of "instantaneous heaters" for the bath.

Special care should be taken to run pipe for fuel purposes of

sufficient size to meet all possible future requirements. No riser or feeder should be less than ¾ inch, no outlet smaller than ½ inch.

On application at our office, a competent representative will be furnished to assist in drawing up specifications for the gasfitting.

Yours respectfully,

GEORGE A. GUILLE, Secretary.

## New Publications.

Any book here noticed will be furnished on receipt of price by the Publishers of the INLAND ARCHITECT.

AMERICAN MANSIONS AND COTTAGES. By Carl Pfeiffer, architect. Boston: Ticknor & Co.

In noticing this work we can hardly do better, by way of introduction, than to quote directly from the publishers' circular, namely:

During the last ten years or more of his life, the late Carl Pfeiffer, F. A. I. A., of New York, busied himself in preparing for publication a work on American domestic architecture, and during this time had prepared with much elaboration over three hundred drawings.

The executor of his estate, finding it necessary in the interests of Mr. Pfeiffer's family to realize all that was possible, asked us to undertake the publication of this material. This we consented to do, expecting that the members of the architectural profession, taking the circumstances into consideration, would assure us by their support that the undertaking would be of value to the beneficiaries.

On examination, we have selected from the material 100 plates, 14 by 18, which we have published in five parts, each part containing twenty plates, the whole inclosed in a handsome portfolio, at the price of $10 for the complete work, payable on delivery. * * * * * * *

The drawings represent designs by Mr. Pfeiffer for dwelling houses of various classes, with all their details, both decorative and constructive, carefully worked out. The draftsmanship is excellent, and many of the drawings have been made by Mr. Bassett Jones and other draftsmen of nearly equal capacity.

The drawings represent, by perspective view, floor plans, elevations, sections and details, some fifteen dwellings; and there are miscellaneous detail sheets from some half a dozen more. The dwellings are for the most part of the cottage type, and of a style now gradually going out of vogue, but always in its better forms adapted to suburban and seaside work. The detail sheets will have a continuing technical value to the student of framed house construction. The complexity of the so-called Queen Anne type, with its multiplicity of planes and features, demanded the greatest skill in constructive detail, and all manner of features are here detailed with unusual elaboration.

PERSPECTIVE: A series of elementary lectures by Ada Cone, late instructor in Massachusetts State Art Schools. New York: W. T. Comstock, cloth 12 mo. $1.00, postage prepaid.

Another work on perspective seems at first thought superfluous, for among the great number of books on that subject there are works adapted to each of the various classes that require a knowledge of the art. Some are undoubtedly addressed to the art amateur; but that something has been lacking in books of this type seems evident, for in our acquaintance with workers of this class we have seldom found one that had any perceptible knowledge of perspective. This cannot be laid wholly at the door of books on perspective; and yet, in some measure, the fault is chargeable to the lack of brevity and simplicity in such works; for although a thorough mathematical foundation is required to obtain a theoretical knowledge of the subject, the majority of art students have neither the time nor the inclination for that science, nor can they indeed see why they need the theory for the uses for which they require perspective. To this class Miss Cone's little book is admirably suited; it is concise and simple, is remarkably free from mathematical technicalities, and the text is explained by a number of very clear cuts. While to the architectural draftsman it is not as valuable as are the more comprehensive works, we know of no more profitable way for those misguided individuals who are trying to learn to draw without understanding perspective to spend a few evenings than in the careful study of this book; and we think that we are within bounds when we say that, after so doing, the average amateur artists would give worlds to recall some of the various gifts which they have inflicted from time to time upon their friends.

SAFE BUILDING. A treatise giving in the simplest forms possible the practical and theoretical rules and formulas used in the construction of buildings. By Louis De Coppet Berg. Boston: Ticknor & Co.

When one glances at this title he finds himself querying what field this book can fill that is not already filled by Trautwine, and Kidder, and Clark, and Baker, and others. Of course, inasmuch as we had become familiar with the general nature of the work through the pages of the *American Architect*, we did not open the book with the same unqualified interrogation that greets a wholly unknown work. The opportunity of examining the whole text together, so far from weakening the previous impression of the real value of the book, has strengthened it in an unexpected degree. Taken as a whole, the work is seen to be more simple, more comprehensive and more readily understood; the parts fall into their proper relation and proportion, and the work is found to have a certain unity. In general, the work is less formal than Rankine and less encyclopedic in character than Trautwine and Kidder. It gives, so far as they bear upon its narrower subject, formulas and tables covering the same ground with Trautwine, and at the same time states informally many empirical facts and data after the nature of "Clark's Building Superintendence." In fact, this work and Clark's naturally take position in one's thought as supplemental and complementary the one to the other. The scope of the work is sufficiently indicated by the titles of chapters, which are as follows: Strength of Materials; Foundations; Cellar and Retaining Walls; Arches; Floor Beams and Girders; Graphical Analysis of Transverse Strains. There are ninety-nine formulas and twenty tables with explanations, examples of calculations and directions as to use. The book is packed with practical information, and its contents will be of almost daily value to one who has not by incessant use mastered the ordinary formulas. The tables are more complete than is customary; for instance, we looked in vain through all the hand-books in the office, recently, to find the weight of a cubic foot of concrete. We found only dry cement and the usual list of stones, while here are given mortars and concretes of various sorts of cement. The tables are well adapted for use in many ways, that on wooden beams being available from any starting point, as material, span, weight, depth, etc.

From what we have said it will be plain that we consider the book of great value to the student. Its value as a reference book to the practitioner is seriously impaired by the lack of an index, the place of which is ill supplied by separate lists of chapters, formulas and tables, arranged, not alphabetically, but by position on page of text. No book without an index is worth for reference the paper on which it is printed; and it is one of the puzzles of book-writing that authors continue to send forth such half-formed products, each, presumably, laboring under the delusion that enthusiastic readers will learn his book by heart, and that an index will be superfluous. A similar deficiency occurs in connection with tables XII and XIII at the end of the text. There is neither direction for their use nor reference to place in text where such reference is to be found. We assumed that there must be an explanation somewhere, and, after thumbing some fifty pages of the text, found, at page 197, the desired explanation. Such carelessness amounts to moral obliquity. The last paragraph of the Introductory Remarks might be cited in support of the assertion that no book should have a preface. This paragraph states that "after this introductory chapter will follow a series of chapters, each dealing with some part of a building, * * * * * for instance, chapters on foundations, * * * * corrugated iron, stairs, sidewalks, chimneys, etc., and possibly, also, chapters on drainage, plumbing, heating and ventilating." It is rather odd to find a published book stating what may "possibly" be found within its covers, though in the absence of an index this may "possibly" be an inducement to read the book through for the sake of finding what is there positively. As a matter of fact there are no chapters on corrugated iron, stairs, sidewalks, drainage, plumbing, heating and ventilating. The discrepancy is no doubt due to the fact that the author has retained in the completed work the "introductory remarks" that appeared at the head of the portions published in the *American Architect*. Such a vain repetition is but a slovenly introduction to so good a book.

ILLUSTRATIONS OF THE SPIRES AND TOWERS OF THE MEDIEVAL CHURCHES OF ENGLAND: Preceded by Some Observations on the Architecture of the Middle Ages and Its Spire Growth. By Charles Wickes, architect. Boston: Ticknor & Co.

Messrs. Ticknor & Co. have here reproduced in one volume the contents of the three volumes of the English edition. To many American readers this work will seem but a reintroduction to an old acquaintance, since a considerable portion of the plates have appeared heretofore in the *American Architect*. To these plates are now added the remainder of the English set, and prefixed thereto are an introductory chapter by Charles Wickes on "The Architecture of the Middle Ages and Its Spire Growth," and a critical essay by Edward A. Freeman on "The Spires and Towers of the Medieval Churches of England." The essay by Mr. Freeman will repay careful study, since scarcely any English author writes with greater knowledge on this subject. His careful analysis of types not only covers the dominant forms, but extends to the offshoots from the main lines, forming a classification of the towers and spires as nearly complete as is possible where the gradual growth of forms admits of variations well-nigh coextensive with number of specimens.

There are in all seventy-two plates, with an average of two illustrations per plate, covering a range of periods and types sufficient to exhibit the successive stages of the growth of the English tower and spire from the formal and artificial early English type through the decorated type into the distinctively English perpendicular form. We continually find ourselves wishing that the scope of the work might have been enlarged to the extent of including a score of plates of details on a larger scale, not necessarily of each tower or spire represented, but of those distinctive specimens that most clearly illustrate the several great periods or groups, or of those specimens in which the active transition is most sharply manifested. We know that there must always be an end somewhere; and yet, like "Oliver Twist," we cry for more.

The drawings are well done, though in a pronouncedly conventional style, most unlike the American work in vogue today. Perhaps the time and space given to droves of cattle and flocks of sheep, and amiable ladies and gentlemen and honest yeomen in rural groupings, would have sufficed for the rendering of those more sharply drawn details which we covet. For, after all, one does not go to a book of this sort for pictures of English rural life and landscape, but for towers and spires.

The publishers have done wisely in getting out the book at a price that places it in the reach of the American public; but a little additional labor and expense, with a proportionally increased charge, would have made the book more available for reference. The author classified only the towers and spires that appeared in the first volume of the English edition. It is to be regretted that the American publishers did not have the other plates classified, or, their character being composite, the approximate date or dates of execution noted. It is a slight matter, but decidedly annoying to the reader, that, even when the classification is given, it is necessary to hunt up the American number, by reference to a detached list, before being able to turn to the plate to which reference is made. A cross reference, when necessary, is a nuisance, and is unpardonable, when, as in this case, it is so utterly without excuse. It would have required neither time nor

expense to the publishers to have bracketed the American number in the classified list.

Some of these defects could be remedied easily in a subsequent edition. There is, however, no question that, in spite of deficiencies and minor defects, the work will be of the greatest value to the American student of architecture, to whom many of the subjects illustrated are not readily accessible in books or photographs.

THE CITY RESIDENCE — ITS DESIGN AND CONSTRUCTION. By W. B. Tuthill, architect, New York. William T. Comstock. Price $2.50; free of postage to any part of the world.

Of the fourteen chapters of this book, the first is introductory; the next three are devoted to a discussion of the planning of the dwelling house, the tenement house and the apartment house; the remainder treat of mason-work, mortars and concretes, iron-work, brickwork in elevation, stonework in elevation, carpenter's work, stairs, plastering, sheet-metal work and painting. It will appear from the above outline that the book is misnamed, and should have been called, "The city residence — its *plan* and construction." The work is written for younger students, and would have no special value for practitioners, if all practicing architects were as well equipped as they should be. Mr. Tuthill has set for himself a definite task — the discussion of the planning and construction of city residences of the average or smaller sort on narrow lots and with limited cost. The discussion is set forth in the simplest and most straightforward way, in a style that is sufficiently clear, though not free from superfluous phrases. No attempt is made at a fundamental theoretical discussion; there is little that would be of immediate service in solving any of the more complicated problems of large or unusual work; and there is often a vagueness in detail in directions given that will compel the student to seek other sources of information. A decidedly local flavor pervades the book, for, apparently, it has not entered the head of the author to conceive that what is common practice in New York City is not, as a matter of course, common practice in good work the country over. He forgets that this is a large country, and that character of soils, and nature of materials, and the divergent growth that is almost as much a characteristic of building as of language, bears fruit in variety of method. However, we do not particularly complain of this latter point; for this naive provincialism, though amusing, is not especially dangerous in its results. It will be no detriment to the Cincinnati or Chicago architect to know how and with what materials good work is commonly done in New York City.

It would be easy to multiply words if we were to follow the book up in detail. There are vague statements that could have been made precise by the addition of a phrase; omissions that could have been supplied in a line, and occasionally we come upon an error of the printer or proofreader. Thus, figure 29 contains a room without a door; a badly drawn perspective in figure 189 obscures the meaning; on page 172 occurs the word "joists," a misprint for "joints." The local bias crops out in such instances as that on page 54, where, in the remarks as to the relative usefulness and cost of brick and stone foundations, each major assertion requires qualification for Chicago and similarly located cities. On page 81, the author, speaking of party walls at roofs (cuts 88 and 89), says the opposite of what he intends to say. On page 90 the author advises bonding of withs in flues above the roof, whereas we take it that good practice requires such bonding from bottom to top. The chapters on plastering and sheet-metal work contain conspicuous examples of that indefiniteness to which we have already called attention. The chapter on painting is at best a perfunctory performance.

If there has been a tone of disparagement in portions of what has thus far been said, we will now more than balance accounts by saying that, so far as our observation goes, this is the best book of the sort for a beginner to take up. He will get a clear idea of the field, an outline map of the subject, and will be ready to read with quicker comprehension a more thorough-going treatise; and even without such further study, will be able to apply in actual practice most of what he has learned from this little work.

BUILDERS' HARDWARE: A manual for architects, builders and house furnishers, by Clarence H. Blackall, architect. Boston, Ticknor & Co. Price $5.00.

The author has the impression that architects, as a class, are lamentably ignorant concerning builders' hardware, that they content themselves with a vague specification, some few details as to door knobs and sash fasts and leave the other details to the honesty and generosity of the builder. We shall not deny the correctness of this impression; but we see no reason why many so-called architects should be up in hardware when they are up in nothing else. On the other hand, we should certainly expect the reasonably well-equipped architect to be posted in hardware, just as in any other matters that pertain to a building. If, however, an otherwise well-equipped architect has paid no special attention to details of the hardware used in his buildings, he can do but one thing better than reading this book, and that is what the author did before he was prepared to write it, namely, study the thing itself. And the main value of the book is, in any case, to help him make an intelligent start toward a thorough knowledge of the subject, for whatever general principle of mechanics or qualities of materials may underlie the whole matter, the details change from year to year, and only constant acquaintance with the products of leading makers can keep his knowledge up to date. Herein, indeed, is the cause of almost our sole important criticism of the work; that, being in its nature ephemeral, it ought to have been placed on the market with the smallest possible expense that would have afforded a tasty make-up. The indexed margins are convenient, but their purpose would have been well enough subserved by a complete general index and at greatly reduced cost. The bulk of the book is also augmented by a certain diffuseness of style that expands the text unduly and makes an equally undue demand on the time of the reader. Judged solely by its contents, the work is timely and valuable. It is not sought to include in its pages a description of all the makes and patterns of hardware for any specific use, but to set forth types of approved value. Every reader will miss some special makes and patterns, perhaps equally serviceable, with which he is familiar, but he will commonly find a kindred form given. The range of the work is from nails and screws, through locks and butts, to the miscellaneous furniture of closets and pantries. The first chapter treats of materials and finishes; the fifteenth, of artistic design and of the more pretentious modern work, and the final chapter, of specifications and of the customary methods of selecting hardware. Errors in the text are unusually infrequent for a first edition. On page 274 we note a misprint, "where" being used when "there" is clearly intended, in the first paragraph. We are not aware of any conflict in the nomenclature of common forms of bolts, and take it that the plates labeled 24 and 25 have been transposed in making up. We heartily commend the book to the profession.

## Recent Legal Decisions.

INTERPRETATION OF BUILDING CONTRACT.

A departure by mutual consent from the original plans, or a notification from the owner to the builder to go on and complete after the time prescribed by the contract had expired, is a waiver of the provision in the building contract that the work shall be completed by a certain time. Close *vs.* Clark, Common Pleas of New York City and county, 9 N. Y. Supp., 539.

ENFORCEMENT OF MECHANIC'S LIEN.

Where material is furnished under an entire contract to be used in the erection of several buildings owned by the same person, and situated upon the same parcel of land, a lien attaches upon the whole, as an entirety, for the gross value of material so furnished (Lax *vs.* Peterson, 44 N. W. Rep. 3). Glass *vs.* St. Paul Carriage and Sleigh Company, Supreme Court of Minnesota, 45 N. W. Rep., 150.

ARBITRATION OF A MECHANIC'S LIEN.

An agreement of submission to arbitration of an action to foreclose a mechanic's lien filed by the plaintiff's company to secure its claim against the defendant was general and included all questions and disputes arising and to arise under said contract, "including all claims of either party for damages for non-performance, delay or otherwise." The award recited that the arbitrators had "heard the proof and allegations of the parties." The award was as general as the submission on the parties as to all causes of an action subsisting between them and springing out of their contractual relations. New York Lumber and Wood Working Company *vs.* Schneider, Court of Appeals of New York; 24 N. E. Rep., 4.

SUB-CONTRACTOR'S LIEN.

The statute of Utah gives a lien to every person performing labor or furnishing material, whether at the instance of the owner or his agent, but provides that the "aggregate amount of such lien must not exceed the amount which the owner would otherwise be liable to pay." Such lien will attach by giving notice to the owner or his agent within thirty days after commencing to perform the labor or to furnish the materials, of the amount due him or contracted to become due him. A sub-contractor, to avail himself of this lien, must include in his notice the amount of the contract with the owner, less any payment for labor performed or materials furnished under the same, before complainant's lien attached. Teahen *vs.* Nelson, Supreme Court of Utah, 23 Pac. Rep., 764.

MECHANIC'S LIEN — REVERSIONARY INTEREST.

When materials are furnished to one who is the owner in fee, the lien, no doubt, attaches not only to the building itself, but also to so much of the ground as may be necessary for the ordinary and useful purposes of such building. But when, as in this case, the property is leased for ninety-nine years, renewable forever upon the payment of an annual ground rent to the lessor and his assigns, and the building is erected by the lessee or his agent, the lien attaches to the leasehold estate only. Though there be an agreement between the owner of the leasehold and the owner of the reversion that the buildings be erected at their joint expense, and when sold the proceeds were to be divided between them, according to their respective interests, a lien for materials will not attach to the reversion as against one who purchases it in good faith before the completion of the buildings without notice of the agreement between the owner and lessee. Bechler *vs.* Ijams, Court of Appeals of Maryland, 19 At. Rep., 646.

MECHANIC'S LIEN.

The New York statutes provide that persons performing work, etc., in erecting any house, etc., "with the consent of the owner," they have a lien on the lot on which the house stands, and that a notice of lien shall state the name of the owner, lessee, general assignee, or persons in possession of the premises against whose interests a lien is claimed. Such notice is sufficient if the names of the persons against whose interests the lien is claimed, shall be given without saying in so many words that the lien is claimed against such persons. Ross *vs.* Simons, Common Pleas of New York City and county, general term; 9 N. Y. Supp., 536.

In an action upon a mechanic's lien to recover for material furnished to a contractor, to whom at the time of filing the notice of the lien there was a sum due by the defendant owner, defendants should be permitted to show in defense that the contractor had not completed the work, the amount of work uncompleted, the cost of completing the work, and any payments made on account of the contract. Frazier *vs.* McGuckin, Supreme Court of New York; 9 N. Y. Supp., 435.

## Our Illustrations.

"Un Chateau en Espagne," Julius A. Schweinfurth, architect, Boston.

Mission Chapel of the Leavitt street Congregational Church, Chicago; Irving K. Pond and Allen B. Pond, architects.

Chicago Architectural Sketch Club competition far an Artist's Home by the Sea. First place, W. B. Mundie; second place, T. O. Fraenkel; third place, C. Bryant Schaefer.

PHOTOGRAVURE PLATES.

(*Issued only to subscribers for the Photogravure edition.*)

Residence of Mr. Arthur Orr, Evanston, Ill.; J. L. Silsbee, architect, Chicago.

Residence of Mr. Harlow N. Higginbotham, Chicago. Burling & Whitehouse, architects.

Residence for Mrs. Kate B. Parish, Kenwood, Ill.; Henry H. Sprague, architect, Hyde Park, Ill.

Residence of Mr, Reynolds Fisher, Kenwood, Ill., Patton & Fisher, architects, Chicago. A full page plate of each of the following views is given, viz: Exterior view, view in hall, view in parlor, view in dining room.

## Personal.

ARCHITECT THOMAS FAIRBAIRN, of Edinburgh, honorable secretary of the Edinburgh Architectural Association, has removed his office to 35 South Castle street.

ARCHITECT W. W. CARLIN, of Buffalo, has removed his office to 52 Court street, corner of Franklin street. The plan of offices and building, designed especially for the purpose, was illustrated and described in a recent number.

MR. CHARLES H. BEBB, of Chicago, for a number of years identified with the fireproof construction firm of the Illinois Terra-Cotta Lumber Company, has been engaged by Architects Adler & Sullivan as building superintendent.

E. HILL TURNOCK, who has for a number of years occupied an important position in the office of Architect W. L. B. Jenney, of Chicago, has opened an office at 151 Monroe street. Mr. Turnock will be pleased to receive catalogues and office samples of building materials.

## Building Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, Ill., July 10, 1890.

In almost all manufacturing and commercial channels, there are satisfactory evidences of healthy activity, strong prices and expanding trade. For the first six months of the year a steady expansion of producing capacity has been observable. Investors have been elbowing each other to secure and control desirable opportunities in almost every state in the Union. A happy expansion and a steady decentralization of industries is in progress. In building operations, some obstruction to fullest activity has been encountered during recent months and in some localities; but the events of the past two or three weeks indicate a revival of confidence, and of determination to prosecute work of all kinds during the coming six months. House, shop and mill building will not suffer or be delayed from any lack of confidence. Within the past few weeks very heavy contracts for building material of all kinds have been placed. Brick makers have been oversold in all sections of the country. Sawmills and planing mills are well supplied with orders to keep them busy for the rest of the season. Iron and steel makers, nail manufacturers, wire manufacturers of all kinds, and the manufacturers of implements and tools, all unite in the statement that business is exceptionally good. There is great activity among the mining interests, and the opening of new mines of coal, ore, lead, copper, silver and gold is referred to with much more frequency than in former years. Labor is contented with the result of its negotiations for better pay. Capitalists see no reason for discouragement in the outcome of their investments for the past six months. A steady enlargement of manufacturing capacity of all kinds may be regarded as certain. While profits are not large, manufacturing interests are contented. There is scarcely any accumulation of stock. New towns are springing up in the newer states. The railroads are enjoying an enormous traffic. Combinations are being made from time to time, which point to a satisfactory solution of the railroad question in the near future. Business men have more confidence in the continuance of favorable conditions than they have had in former years. A sort of automatic balancing of interests is developing. The business interests are seeking to exert greater control over the action of the public servants in national and state capacities. The advantage of an ample supply of currency is recognized on all sides, but considerable difficulty has been met with in the effort to harmonize apparently conflicting interests. Hosts of new projects are coming to the front. The contractors and builders throughout the country have every confidence, at present, that the favorable conditions of the past year or two will continue.

## Synopsis of Building News.

**Ann Arbor, Mich.**—The Chi Psi Fraternity will erect a $20,000 club house.

**Allegheny, Pa.**—Architect A. E. Linkenheimer is preparing plans for the New City View schoolhouse to cost about $6,000.

Architect C. W. Hodgdon: For the tenth ward school, additions and alterations; cost $6,000.

**Ashland, Wis.**—Proposals are wanted for the erection of a water works system. Address Ashland Water Supply Company.

**Birmingham, Ala.**—Architect D. A. Helmich: For Messrs. Loveman, Joseph and Loeb, a four-story business building, size 60 by 200 feet. Pressed brick, tin roof and steam heating; cost $50,000. Contract not let.

Building outlook here is good.

**Buffalo, N. Y.**—Architects C. K. Porter & Son: For the Franciscan Friars, a church and monastery, stone building, to cost $92,000.

**Chicago, Ill.**—Architect Charles S. Frost is letting contracts for the eight-story office and printing building to be erected on the southwest corner of Michigan avenue and Madison street, for the Western Bank Note and Engraving Company. The front will be constructed of brown pressed brick with terra-cotta trimmings; the main entrance and second and third floors will have marble floors and wainscoting. The building will be of steel construction and thoroughly fireproof. Will put in electric light, three elevators, steam heat and power. The ground floor will be used for stores and second and third for offices, and the remainder for the company. He is also letting contracts for a three-story and basement residence to be erected at 2827 Prairie avenue for John C. Keep. It will have a blue Bedford stone front and side, hot water heating and all the sanitary and modern improvements and cost $30,000. Also made plans for a three-story and basement residence to be erected on Drexel boulevard between Forty-fifth and Forty-sixth streets, for N. W. Harris. The front will be of raindrop brownstone; will put in hot water heating, electric gas lighting, etc.; cost $30,000.

Architects Burnham & Root are preparing plans for the Masonic Temple to be erected on the northeast corner of State and Randolph streets. The design for the front shows a magnificent eighteen-story structure, 240 feet high from the sidewalk. It will be constructed of pressed brick, terra-cotta and stone, will be of steel construction and absolutely fireproof; will have twelve elevators, steam heat, electric light and all the finest of improvements. It will have a frontage on State street of 170 feet and depth of 113 feet on Randolph. The cost will be $2,000,000. Work is expected to be begun on August 1 and the building completed in two years. The extreme height of the building up to the finial on the gables as shown in the design will be 288 feet, 48 feet higher than the top of the Auditorium tower.

Architect R. T. Newberry is making plans for a block of two-story dwellings, to be built on Central Park boulevard for N. L. Hansen. The fronts will be of Tiffany pressed brick, with Bedford stone trimmings.

Architect Thomas Scott is preparing plans for a four-story and basement store and flat building, to be built on the corner of Madison avenue and Fifty-fifth street, for Mrs. Josie Krick. It will have two fronts of red granite, closets, mantels, bathrooms, hardwood finish, gas ranges and fireplaces, marble tiles, etc.; cost $30,000. He is also making plans for a two-story frame residence, to be built at Batavia, Illinois, for William P. Barker. Will put in hot-water heating, bathrooms, closets, mantels, stained glass; cost $7,000.

Architect W. L. Carroll is making plans for a three-story store and flat building, to be erected at 171 Center street, for Cole Brothers. Bedford stone front; cost $8,000.

Architects Burnham & Root have just let the contract for the erection of the "Temple" building to be built on the southwest corner of La Salle and Monroe streets, for the Woman's Christian Temperance Union, to the George A. Fuller Company. It will be a fourteen-story structure, with a frontage of 192 feet on La Salle street, and will be constructed of Obsidian brown brick, with terra-cotta trimmings; the two first stories will be of granite. The building will be of steel construction and perfectly fireproof. Will put in eight elevators, steam heat, electric light, etc.; cost $1,000,000.

Architect F. B. Abbott made plans for a three-story and basement residence, to be erected on the Lake Shore Drive, between Professor Swing's and Robert Lincoln's residences, for C. C. Heisen. It will be constructed of red granite all round, with antique tower on the northeast corner with balcony and tiled roof. Will put in hot water heating, mosaic floors and ceilings in bathrooms; to be finished all in hardwoods; the cost will be $60,000. Also made plans for an eight-story apartment house, to be erected on Cottage Grove and College Place. It will be constructed of Pennsylvania serpentine greenstone, rock-faced. Will have a frontage on Cottage Grove of 150 feet and on College Place of 115. Will put in steam heat, four elevators, dumb waiters, etc.; cost $150,000.

Architect J. C. Swalm has just let the contract to E. W. Westcott, of 835½ West Polk street, for the erection of the Brice A. Miller residence, to be built at 46 Roslyn Place. It will have a beautifully designed front of brown and buff Amherst stone with slate roof; will put in steam heat and all improvements, cost $20,000.

Architect C. A. Weary made plans for a block of six two-story stores and flats, to be erected corner of Ohio and Trumbull avenue, for Holman & Crowley. The front will be of Anderson pressed brick and Bedford stone; cost $20,000. Also made plans for a three-story flat building, to be built on Park avenue, west of Kedzie, for Dr. P. Fahrney. Anderson pressed brick and stone; cost $16,000. Also for H. A. Eaton, a two-story residence, to be built on Washington boulevard near Francisco street; to have a Bedford stone front, hot water heating, hardwood finish; cost $10,000.

Architect J. A. Thain is working on plans for a two-story residence, to be built on Ashland boulevard. It will have a handsome stone front, hot water heating, and cost $30,000.

Architects Holabird & Roche are making plans for a sixteen-story office building, to be erected at 265 to 271 Dearborn street, for Francis Bartlett.

Architect Henry Sierks is making plans for a four-story store and flat building, to be erected corner of Milwaukee avenue and Western avenue, for H. Schuttler. The front will be of St. Louis pressed brick with Bedford stone trimmings; the cost will be about $60,000. He also made plans for a two-story residence, to be erected at 44 Fowler street, for M. Tausig. It will have a blue Bedford stone front, steam heat, hardwood finish, etc., and cost $13,000.

Architect H. R. Wilson is letting contracts for a three-story residence, to be erected on Michigan avenue near Thirty-sixth street, for A. Hart. It will have a handsome front of white Georgia marble; to be finished in oak, mahogany, cherry and birdseye maple, have hot water heating and cost $25,000. Also working on plans for a two-story residence, to be built on Michigan avenue, next door to the above. Will have a St. Lawrence marble front and red tiled roof, hot water heating and all the improvements and cost $20,000; for Louis Stein.

Architect Alfred Smith made plans for an eight-story office and bank building, to be built on the triangular lot at the junction of Madison street and Ashland and Ogden avenues, for A. J. Stone; there will be three fronts; the first two stories will be of stone, and above of terra-cotta; it will be fireproof, and have steam heat, electric light, boilers, vaults, safety deposit boxes, and all the modern conveniences; the cost will be $150,000. Also for A. E. Kent, a two-story store and flat building, on the northeast corner of Polk and Hoyne, and a two-story flat building on the northwest corner of Polk and Robey, and for the same owner, seven three-story stores and flats corner of Forty-third and Calumet, to cost $50,000. And for H. Vollmer, a three-story flat building and a three-story dwelling, to be built on Robey and Adams streets; Tiffany pressed brick and Bedford stone; cost $17,000.

Architect L. G. Hallberg made plans for a three-story store and flat building, to be erected on Wentworth avenue near Fifty-sixth street, for S. M. Dunning; pressed brick and stone; cost $20,000.

Architects Faber & Pagels: For John Alles, Jr., a two-story frame residence at Winnetka; bathrooms, closets, mantels, furnace; cost $7,000; making plans.

Architect J. H. Huber: For Charles Steinbrecher, six two-story dwellings, and ten two-story flats, to be erected on Superior street near Western avenue; pressed brick and stone, bathrooms, closets, mantels, furnaces, stained glass; cost $60,000; making plans.

Architect S. M. Randolph: For Lowther Hall Masonic Association, making plans for a five-story and basement building, to be erected on the southwest corner of Madison street and Colorado avenue. It will have two stone fronts and contain stores, lodge rooms, Masonic hall, ballroom, and large hall on the top floor; will put in steam heat, elevators, electric light, fireproof vaults, etc.

Architect J. J. Kouhn: For Pythian Temple Company, a three-story building, to be erected corner Clark street and Oakdale avenue; it will be 198 by 120 feet in size, and cost $200,000; the first story will be of rock-faced stone, and above of pressed brick, with slate roof; it will contain ten stores, apartments, auditorium to seat 2,000 people, bowling alley, ballroom, barber shop, etc., and will be heated by steam, lighted by electricity, and have the modern improvements.

Architect A. L. Schellenger: For Herman Hand, two two-story residences, to be erected corner of Seventy-second and Wentworth avenue, stone and frame, furnaces, etc.; cost $12,000.

Architect Wesley A. Arnold: For Mrs. Anna D. Kellogg, a two-story residence at Oak Park. Furnace, bathroom, mantels, stained glass; cost $6,000. For N. M. Jones, a two-story residence at Oak Park; furnace, etc.; cost $5,000. Also making plans for three residences to be erected at Evanston, one to cost $12,000, and two $4,000 each; furnaces bathrooms, mantels, etc.

Architects Thiel & Lang: For Moody & Waters, making plans for a two-story bakery, size 110 by 120 feet, to cost $20,000, to be built corner of Congress and Aberdeen streets; Indiana pressed brick and stone, steam heat, etc.

Architect H. T. Kley: For Fred Haussen, a three-story store and flat building at 1202 Milwaukee avenue; Collinsville pressed brick and Connecticut brownstone; cost $9,000. For C. Seegers, a three-story store and flat building at 1204 and 1206 Milwaukee avenue, to cost $18,000, and a three-story store and flat building at 405 West North avenue; Collinsville pressed brick and brownstone; cost $8,600.

Architect William Ohlhaber: For John Weild, a two-story residence; blue Bedford stone front, furnace, mantels, bathrooms, etc.; cost $6,000.

Architect A. Druiding made plans for St. Mary's Catholic Church to be erected at East St. Louis; furnace, stained glass, pews; cost $20,000. For St. Vincent's school, Chicago, steam heat, etc. For St. Mary's Church at Wausau, Wis., brick and stone, furnace, bells, stained glass, pews; cost $15,000. For Catholic church at Pittsburgh, Pa., 72 by 160, with two towers 178 feet high; steam heat, etc.; cost $100,000. For St. John's Church, Waverly Mills, Minn.; stone, furnace, etc.; cost $28,000. For Catholic church at Westphalia, Kan.; brick and stone, hot water heating, etc.; cost $14,000.

Architect H. F. Starbuck is preparing plans for an Episcopal church to be erected at Superior, Wis.; it will be built of red sandstone and will have furnace, pews to seat 250 persons, stained glass, etc., and cost $9,000.

Architects Patton & Fisher: For W. S. Walker, planning four two-story residences to be built on Ellis avenue near Forty-third street; pressed brick and stone, furnaces, bathrooms, mantels, stained glass; cost $20,000. For H. C. Johnson, a two-story residence on Forty-second Place and Drexel boulevard; stone front, etc.; cost $6,000. For L. Muther, at Oak Park, a two-story frame residence; hot water heating, etc.; cost $7,000.

Architects Howe & Shelton are making plans for remodeling the Englewood opera house; will put in new interior, opera chairs, steam heat, etc.; cost $15,000. For W. P. Lasher, a three-story frame hotel at Minonk, Ill.; steam heat, bathrooms, mantels; cost $15,000.

Architect George H. Borst: For George L. Brown, a two-story flat building and stable at 2925 Indiana avenue; Bedford stone front, steam heat and modern improvements; cost $12,000.

**Cincinnati, Ohio.**—Reported by Lawrence Mendenhall:

The strike at the present writing is still unsettled, and the delay in settlement is working great loss to the building trades and to the mechanics themselves. Today commences the fifth week of idleness, and with 1,200 carpenters idle, who in turn compel the bricklayers, plasterers, painters and other mechanics to lay off, the loss to the *laborer* cannot be less than $100,000. The loss to the building business will not fall short of $500,000. The demand for nine hours' work with ten hours' pay was met with a proposition from the bosses placing September 1 as the date. This was declined, and called forth another fixing August 1 as the time, and making an increase in wages. This was also declined, and met with a proposition from the men fixing July 15 as the date, the other points being agreed to.

To my mind and manner of thinking, the demands of the mechanics are not unreasonable as to *rate*, but the manner in which they were made I do not consider as *fair*. The contractors were willing to grant the requests of their men, had they been made in an equitable way. In answer to this objection comes the reply from the men, "You have fooled us before." If there has been a breach of faith and trust on the part of contractors, it is an exemplification of the adage, "Chickens will come home to roost." A man's word should be as binding as a bonded contract. I am in hopes that everything will be settled in a few days, and that something may be saved from the wreck. As a result of all these causes plans to report are not very plentiful.

Architects Samuel Hannaford & Sons are busy on the plans for a building for St. Xavier Church; it will be of brick, with slate roof, and be used as a school, with hall, chapel, etc.; probable cost about $80,000.

Architect A. C. Nash is busily engaged on the plans for the addition to the St. Nicholas Hotel. The work will be very complete.

Architect George W. Vogel reports the following plans: For August Saners, Esq., Newport, Ky., a residence; materials, common brick, pine finish, gas, plumbing, stained glass, slate roof, etc.; cost $4,000. For Mrs. Longley, Dayton, Ky., a residence; materials, common brick, pine finish, slate mantels, slate roof, etc.; cost $3,000.

Architects Des Jardins & Hayward report: For the German Lutheran Church, Walnut Hills, a church edifice; write to Messrs. Bice & McMillar, 22 Garden street, city; cost $12,000. Also plans for a church at Madisonville, Ohio; materials, brick, slate roof, organ, pews, etc.; cost $12,000; write to W. W. Peabody, city.

Architect Adam J. Bast reports: For Mr. E. Leyman, a stable; materials, pressed brick, cement floors, stable fittings, gas and plumbing; cost $7,000.

Architect William S. Robinson reports: For F. C. Grote, Esq., Fourth and Plum, a residence; materials, brick, pine finish, inside blinds, wood mantels, gas, plumbing, slate roof, etc.; cost $3,000.

Architect John H. Boll reports: For Thomas Gannon, a flat building; materials, brick, iron mantels, pine finish, gas, plumbing, etc.; cost $7,000.

Architect J. G. Steinkamp reports: For Thomas Emery's Sons, five dwellings; materials, frame, poplar finish, blinds, grates, iron mantels, slate roof, etc.; cost $20,000; inclose stamp for reply.

Architects Reig & Marty report: For Peter Seiwert, a residence; materials, brick, pine finish, iron mantels, slate roof, plumbing, gas; cost $3,800.

Architect W. W. Franklin reports: For Miss Clara G. Kuhn, city, a residence; materials, frame, pine finish, wood mantels, stained glass, slate roof, gas, plumbing, etc.; cost $4,500.

**Denver, Colo.**—Interviews with the leading architects of the city show that while most of them express sympathy with the labor cause, the general opinion among them is that a general strike would be more damaging to the city than advantageous to the strikers.

Work on the Chamberlin Observatory building for the University of Denver will go ahead at once, as it is intended to have the building ready before the end of summer, when the great glass will have been finished by the Messrs. Clark. Putting in the foundation for the telescope is a task which requires the most exact attention and skill, as any deviation from perfection would materially interfere with the operation of the immense, but exceedingly delicate, instrument. The machinery to handle the tube is being made at the same time as the glass.

Messrs. Bailey & Kidder will erect a $300,000 hotel building here, to be commenced this summer.

Architect J. J. Huddart has prepared plans for a $50,000 brick business block.

**Detroit, Mich.**—Work is very slack at present, not having recovered as yet from the effects of the strike; it is hoped though that work will brighten up for fall work.

Architects W. L. Smith & Son: For Johnson Glover, a five-story laboratory, size 40 by 58 feet, brick and stone; cost $18,000; contractor, F. Buhlson. For Henry P. Glover, a three-story brick store and warehouse, size 40 by 50 feet; cost $8,000.

Architects Mason & Rice: For James E. Scripp, a one-story stone church, size 100 by 35 feet; cost $40,000. For the Mary Palmer Memorial Church, a two-story brick rectory, size 32 by 42 feet; cost $5,000.

Architects Scott, Kamper & Scott: For Alexander Fowler, two four-story stores, size 50 by 61 feet, brick and stone; cost $11,000; builders, Mitt & Clark. For Daniel Scotten, a three-story stone residence, to cost $50,000; also for the same, a five-story addition to hotel, size 100 by 120 feet; cost $250,000.

Architect E. C. Van Leyen: For Messrs. Skinner & Co., six three-story dwellings, size 80 by 90 feet, brick and stone; cost $30,000. For F. W. Baselly, a two-story dwelling, size 30 by 56 feet, brick with slate roof; cost $5,500.

Architects A. C. Varney & Co.: For W. J. Evans, a two-story double residence, size 48 by 52 feet, brick and stone, with slate roof; cost $7,000.

Architects Malcomson & Higginbotham: For L. B. Littlefield, a two-story dwelling, size 34 by 60 feet, brick and stone, slate roof; cost $7,500.

Architect George E. Meyers: For Myers & Hyland, two-story frame store and dwelling, size 30 by 56 feet; cost $5,000.

Architects names not reported: For A. W. Holcombe, three-story double dwelling, size 42 by 52 feet; cost $6,000. For A. Corbeille, two two-story frame dwellings, size 24 by 56 feet; cost $5,000. For John J. Owen, two dwellings; brick and stone, slate roof; C. A. Fullerton, builder.

**Grand Rapids, Mich.**—The New England Furniture Company will add a six-story addition to their factory, to cost about $25,000.

Architect W. G. Robinson: For Messrs. Stickley Bros., of Birmingham, New York, a three-story brick furniture warehouse.

The Young Men's Christian Association are now ready to adopt plans for a $50,000 association building.

**Kansas City, Kan.**—Plans are being made for a Young Men's Christian Association building, to be erected at once; estimated cost $20,000.

**Kearney, Neb.**—Architects J. B. McElfatrick & Sons: For the Kearney Opera House Company, a large opera house and office building, to cost $100,000.

The Union Pacific Railway Company will erect a $20,000 depot here.

**Little Rock, Ark.**—Architect Fred J. H. Rickon: A two-story frame residence; size 32 by 68 feet; cost $3,000.

Architect Thomas Harding: For A. B. Smith, at Newport, a large brick hotel building; cost $18,000. Contracts not let.

**Minneapolis, Minn.**—Architect C. F. Struck: For the Century Piano Company, a five-story piano factory building, size 100 by 100 feet, stone and brick, pitch and gravel roof, steam heating, electric lighting; cost $40,000; builders, Leen & McLeod. For Emil Ferrant, alterations to dwelling house, size 36 by 50 feet; frame, with stone foundations; cost $1,500; builders, Pike & Cook. For William Painn, at Brainerd, a two-story store building, size 48 by 80 feet; brick and stone; cost $6,000. Also, for Messrs. Boesch & Maltzahn, at New Ulm, a two-story store block, size 85 by 80 feet; brick and stone, with tin roof; cost $22,000.

Architect F. A. Clarke: For K. Goldblum, a three-story store and tenement building, brick, size 44 by 100 feet; cost $12,000; builder, C. Peterson. Also, for C. P. Smith, two frame dwellings, size 32 by 48 feet; cost $14,000.

Architect S. Berg: A three story brick tenement building for self, size 143 by 66 feet; to cost $30,000.

Architect George N. Goodwin: For James A. Paige, a two-story dwelling, brick, size 36 by 55 feet; cost $10,000.

The following permits have been issued during the last month: C. Anderson, block of flats, $8,000; Kinnard Press Company, machine shop, $5,000; M. A. Bradford, block of stores and flats, $25,000; S. E. Demenles and P. Sacrosse, two dwellings, $6,000; Rudd & Whitney, three-story brick stores and flats, $20,000; J. H. Edmonds, dwelling, $6,500; A. Harris, dwelling, $3,500; W. S. Moore, three dwellings, $7,500; August Gagnon, brick block of stores and flats, $20,000; J. B. Tabaun, dwelling, $10,000; Crocker, Fish & Co., brick warehouse, $4,000; J. M. Robinson, block of stores and flats, $13,000; Emil Ferrant, alterations, $4,500; C. A. Keep, remodeling dwelling, $4,000; Andrew Olson, dwelling, $3,000; C. S. Brackett, dwelling, $8,000; Kinney & Willcome, two dwellings, $10,000; N. W. Cook, two dwellings, $12,000.

**Monticello, Ark.**—Architects Rickon & Gibb, of Little Rock: For Professor Hineman, a frame school building, size 60 by 70 feet; to cost $5,000. For R. F. Hyatt, a brick bank and store; cost $7,000.

**Omaha, Neb.**—Architect H. Voss is preparing plans for a hospital for the St. Joseph Sisters of Mercy; the building to be of brick with stone trimmings, to cost about $100,000.

**Pittsburgh, Pa.**—Architects Bickel & Brennen: For Mr. Kelley, three four-story store buildings, brick with terra-cotta trimmings; contract not let.

Architect F. C. Sauer: For Mr. R. Arthur, a four-story hotel; size 24 by 121 feet; brick, with tin and slate roof; cost $17,000. Builders Benz Brothers.

Architect A. Druiding: For the SS. Peter and Paul's Roman Catholic Congregation, a one-story church; size 60 by 160 feet; cost $47,000. Builders Benz Brothers.

Architect T. D. Evans: For Lincoln Sub-District school a two-story schoolhouse; size 92 by 67 feet; brick; iron shingle roof; cost $30,000. Contractor, W. W. Miller.

Architect W. C. Fraser: For D. C. Kuhn, a three-story bank, size 20 by 90 feet; brick; tin roof; cost $10,000. Contractor, D. Becher.

Architect James T. Steen: For The Dispatch Publishing Company, a three-story publishing house; size 20 by 150 feet; brick; fireproof roof; cost $57,000.

Architect T. J. Osterling: For the Central District and Printing Telephone Company, an eight-story office building; brick; tile and asphalt roof; cost $140,000; contractor, Henry Shink.

**San Francisco, Cal.**—Architect C. I. Havens: For Mahoney Bros., a two-story brick warehouse; cost $15,750.

Architect Henry Geilfuss: For G. Witzel, a two-story frame dwelling.

**San Diego, Cal.**—Architect W. S. Hebbard reports: A power house for the San Diego Cable Railway Company, corner Fourth and Spruce streets, 100 feet front by 200 feet long, built of brick; cost about $25,000. A residence and stable for D. D. Dare, of Sespi; brown sandstone; stained and beveled plate glass; hardwood finish, etc.; cost $32,500. Frame house for W. L. Foevert, on Florence Heights; cost $3,500. Frame house for M. Lovett, Florence Heights; cost $3,500. Frame house for C. L. Barber, Fourth and Robinson avenue; cost $3,000. Pavilion for San Diego Cable Railway Company, Mission Park; cost $5,000. Hotel for San Diego Cable Railway Company; thirty rooms; cost $5,000. A brick and stone residence for J. C. Collins; contract not let. The outlook in the building line here is good.

**Seattle, Wash.**—The Seattle Electric Light Company will erect a new plant in this place.

Architects Kissom & Morris, of Tacoma: For Messrs. Stewart, Bailey & Baxter; a four-story office block; size 45 by 112 feet; brick; cost $33,000. Contractor, James Spurr.

**St. Louis, Mo.**—Swedish M. E. Church will erect a church at a cost of $7,000.

D. Arnold will erect a two-story brick school; cost $12,000; contractor A. E. Cook.

W. M. Hopkins will erect a two-story brick building to cost $17,000.

Contractors J. B. La Barge & Co., For the Samuel Cupples Real Estate Company, a seven-story brick warehouse; cost $180,000. For the St. Louis College of Physicians, a three-story brick medical college; cost $35,000.

Contractor Philip Riechers: For the Security Building Company, an eleven-story office building; brick; cost $700,000.

**Superior, Wis.** Architects Barber & Barber: For Messrs. Myers Bros., of Duluth, a five-story flat block; size 90 by 140 feet; cost $100,000.

**Tacoma, Wash.**—The contracts for the erection of the court house will be let in about three weeks. Proctor & Dennis, architects.

Architects Kissom & Morris: For Messrs. Kahler & Wells, a six-story warehouse block, size 50 by 100 feet, brick; cost $45,000. Contractor D. B. Adams. For the News Publishing Company, a four-story printing house, size 25 by 100 feet, brick; cost $17,000. Contractor, P. Savory. For W. O. Rice, Esq., a two-story residence, size 32 by 52 feet; cost $6,500. For M. M. Smith, a two-story residence, size 34 by 48 feet; cost $6,000. For J. H. Parker, a two-story residence, size 27 by 46 feet; cost $4,000. For J. W. Anderson, a two-story brick residence, shingled roof, size 58 by 64 feet; cost $20,000. For S. P. Holmes, a two-story residence, size 31 by 54 feet; cost $6,000. Contractors, Link & Estes. For S. B. Dusinbue, a two-story dwelling, size 30 by 40 feet; cost $1,000. For J. B. Best, a two-story residence, 32 by 47 feet; cost $5,000.

Building at present is generally active, but there is not as much projected as expected, although far in excess of same time last year.

**Toledo, Ohio.**—Architects Baker & Huber: For Charles Hanner, a two-story frame tenement building; cost $5,000. For J. L. Gillett, a two-story frame dwelling; cost $4,500. Also the Consolidated Street Railroad Company, a two-story brick and stone power building; cost about $8,000.

Architect A. Liebold: For Mr. F. Demey, a brick dwelling; cost $8,000.

**Topeka, Kan.**—Architects Perkins & Adams: For Dr. G. W. Hageboom, a brick dwelling; cost $15,000. For Dr. C. H. Ginbar, a $5,000 residence. For Mr. J. Kaczynski, a two-story dwelling and store building, pressed brick; cost $9,000.

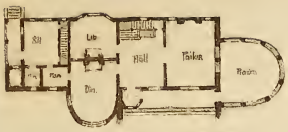
Architect Seymour Davis has prepared plans for the new university building, to cost about $150,000.




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FIRST PLACE—W. B. MUNDIE.




Sketch Plan First Floor




Second Floor



Corner of Studio



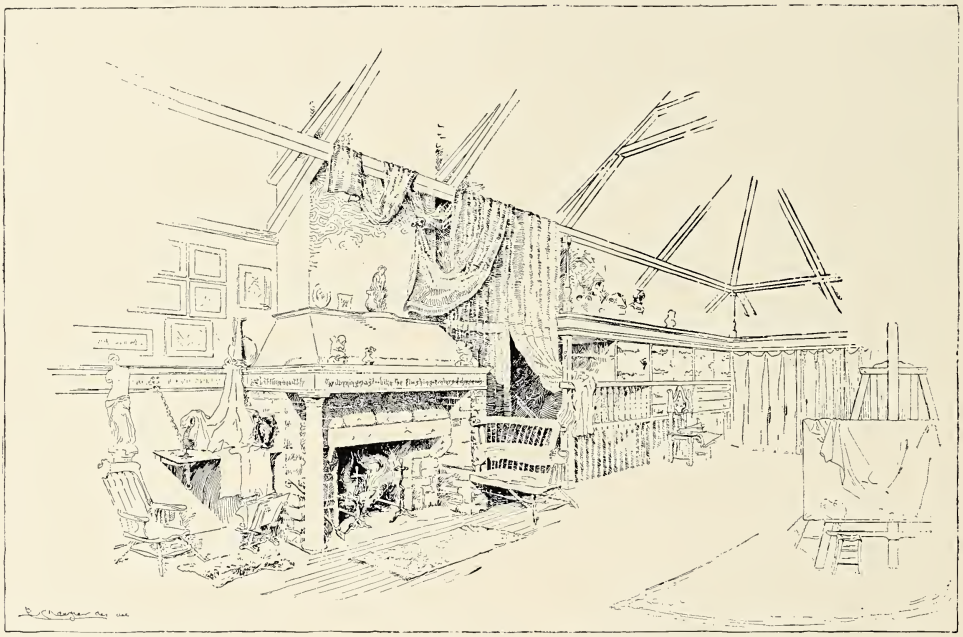
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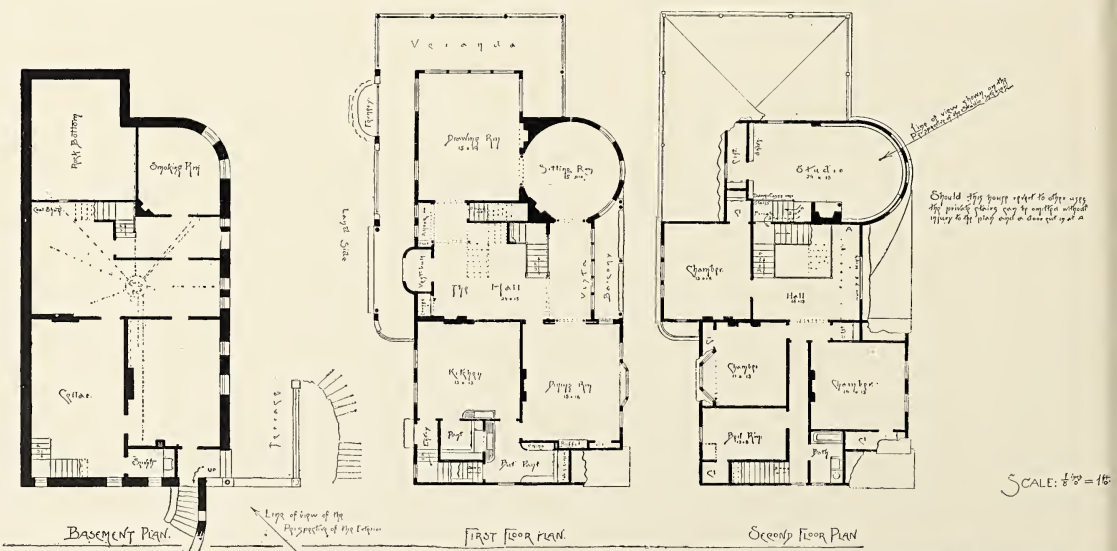
CHICAGO ARCHITECTURAL SKETCH CLUB COMPETITION FOR AN ARTIST'S HOME BY THE SEA.

Second Place—T. O. Fraenkel.



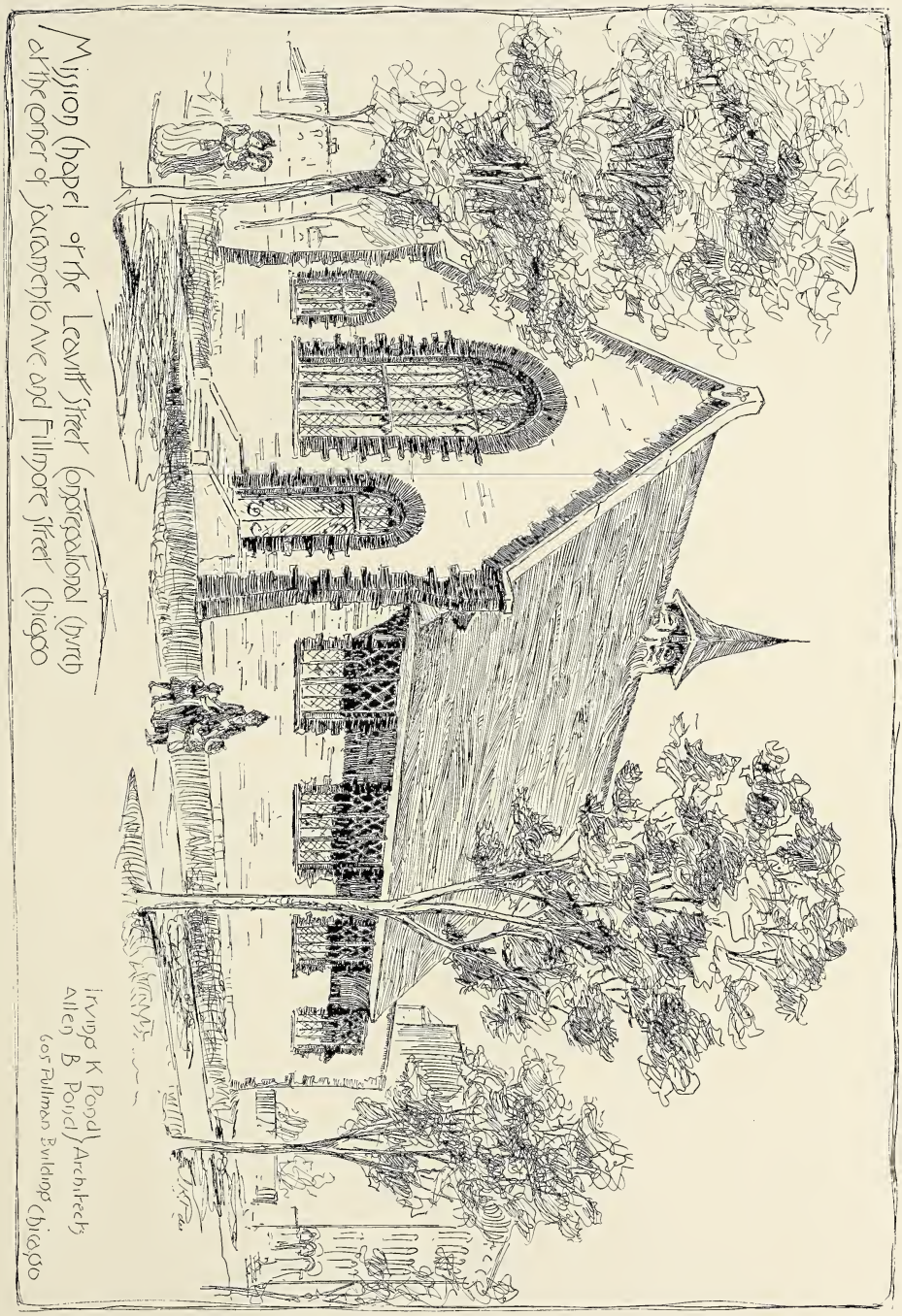




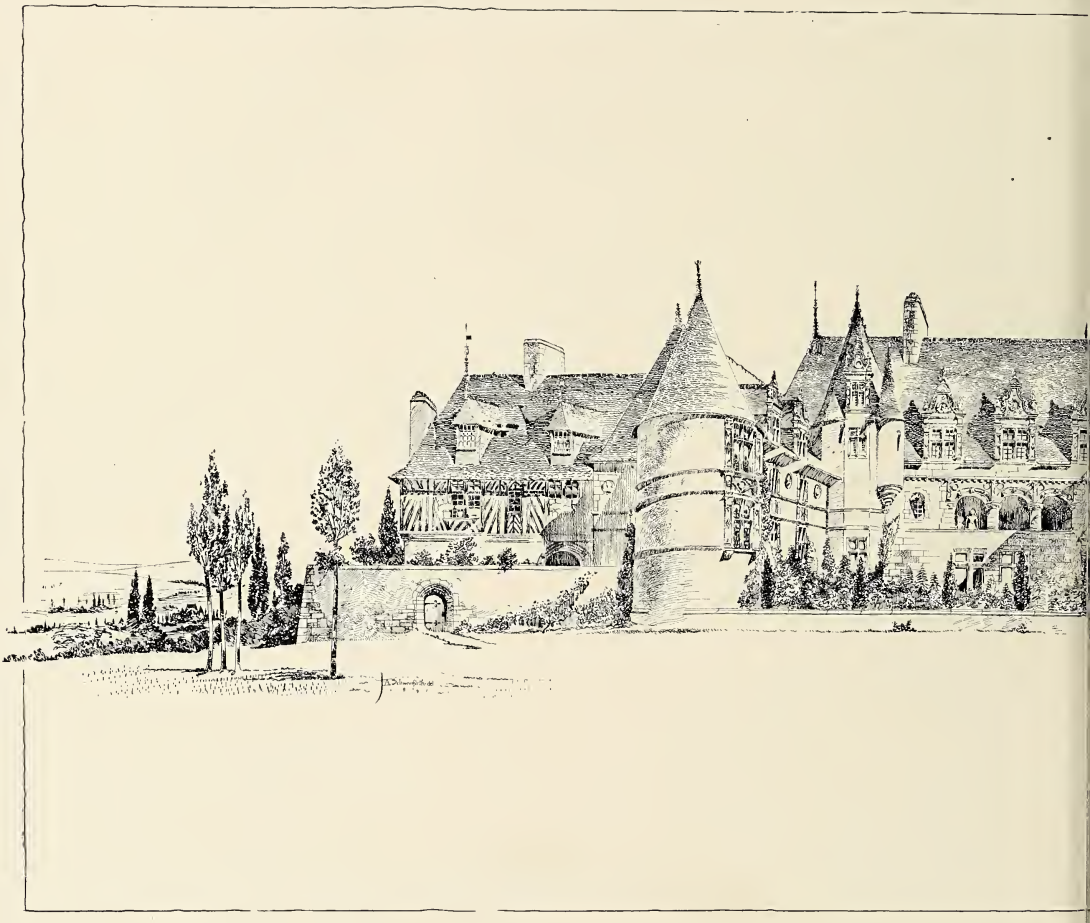

CHICAGO ARCHITECTURAL SKETCH CLUB COMPETITION FOR AN ARTIST'S HOME BY THE SEA.

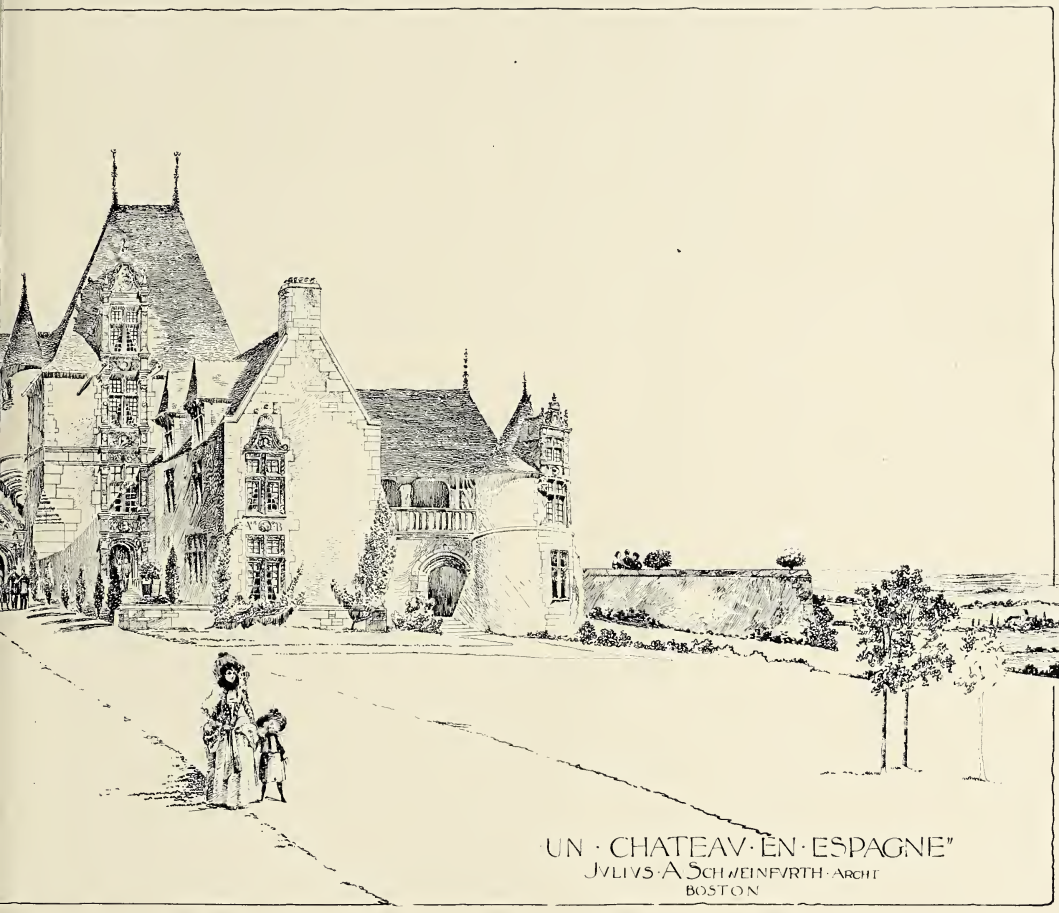
THIRD PLACE. C. B. SCHAEFER. (Exterior perspective traced from watercolor.)

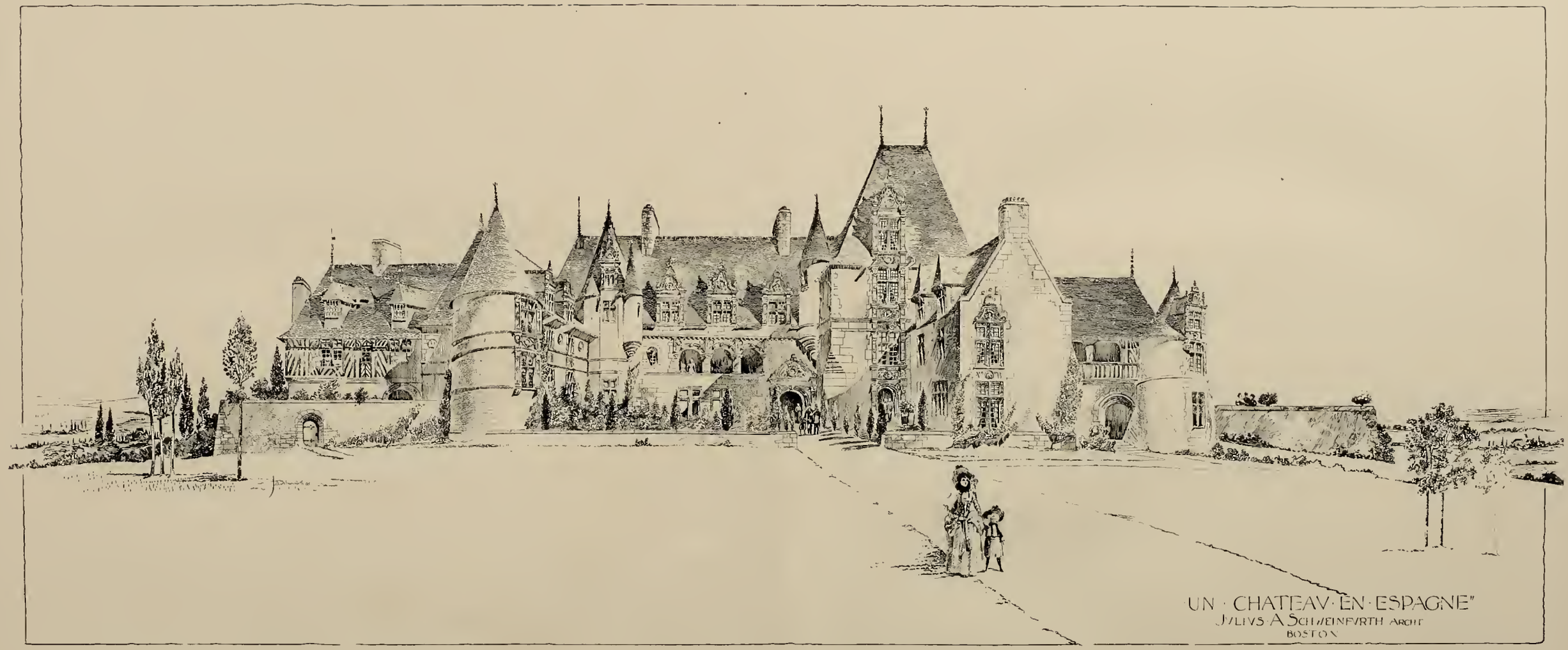


Mission Chapel of the Leavitt Street Congregational Church
at the corner of Sacramento Ave and Fillmore Street Chicago

Irving K Pond
Allen B Pond
Architects
608 Pullman Building Chicago




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# THE INLAND ARCHITECT AND NEWS RECORD

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AUGUST, 1890.

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IN THE WEST.

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Progress of World's Fair Work at Chicago.

Since our last issue the work which we predicted in regard to legislation affecting the World's Fair at Chicago and the action of the directors has been fulfilled. The city council adopted the bill offered by the directors with slight modifications, the state legislature met in special session and passed a bill waiving the state's rights and making appropriation for the improvement of parks as requested by the Board of Directors. All this work met and still is meeting the opposition of the politician and the real estate shark, but it cannot cripple the well laid plans of the superb Board of Directors, whose judgment is the sum of the intelligence and business sagacity of the most progressive city in the world, in this the end of the nineteenth century. The municipal and state sanction having been obtained, the committee upon buildings and grounds at once commenced surveying the proposed sites, and called to their aid Frederick Law Olmsted, the landscape architect. His report upon the Jackson Park site was not altogether favorable and may lead to some slight changes in that plan, but the difficulties he pointed out should be overcome. In relation to the procuring of plans for the buildings, the laying out of grounds and the designing of buildings, the most comprehensive statement will probably be found to the sections relating thereto in the report of the committee on buildings and grounds of August 12, which are as follows:

*Fourth.* Your committee report in favor of the following organization for securing the prompt and satisfactory preparation of grounds and designs for and construction of buildings for the Exposition. That it be allowed to select, with the advice and consent of the Board of Directors, the following compact advisory staff:

(1) A Consulting Architect.
(2) A Consulting Landscape Engineer.
(3) A Consulting Engineer on Construction.

It will be the duty of the Consulting Architect to assist your committee to carry out the various designs of the architects who may plan the buildings and to have such discretionary power as may seem expedient to your committee.

The Consulting Engineer on Grounds to have charge of laying out and beautifying all grounds.

The Consulting Engineer on Construction to be familiar with practical construction in its broadest sense.

The time for the planning and construction of the buildings is so short that the organization must be compact to be efficient and rapid in its work.

Your committee is not favorably impressed with any scheme or plan yet suggested for securing competitive designs for the various buildings.

The time is so short that it is the belief of your committee that better and quicker results can be obtained by intrusting your committee with power to proceed in accordance with the tenor of this report.

Your committee respectfully urges that as much of this report as is favorably received be approved at once, as a very large amount of work confronts our corporation.

DE WITT C. CREGIER.
E. T. JEFFERY.
R. A. WALLER.
GEORGE R. DAVIS.
OWEN F. ALDIS.

This report was unanimously adopted by the directory. The consulting architect and other experts recommended are selected and will probably be appointed before this is out of press. In advance we can heartily indorse the appointments, and congratulate the committee upon the firm stand they have taken against the various competition schemes that have been presented with more or less assurance for their consideration. If the committee's condemnation of competition schemes needed any defense with a profession that holds competitions to be an evil, and even in most cases unprofessional, the fact that only the best architects in the country should design the buildings, and absolutely none of those who have done the best work the cities of the United States exhibit would enter, would be sufficient to show the folly of such a course, let alone the time that would be wasted in the interval. The work

of those who have been selected for the positions of consulting architect, landscape architect and engineer on construction will be largely under the direction of the consulting architect, who will be in reality a supervising architect. The general plan and character of buildings will be outlined by him, and upon his recommendation other architects throughout the United States will be appointed to perform specified work. The entire course of this committee is commended by the public at large.

Influence of Architectural Exhibitions Upon the Art.

A characteristic common to the three recent architectural exhibitions is the marked degree of refinement in the designs illustrated. The unlicensed freedom that has accompanied in America the breaking away from conventional styles has in this decade been fruitful of an amount of crudity and coarseness, and, it might in truth be said, of downright brutality that is infinitely harrowing to every well-ordered mind. Buildings, big and little, public and private, in each style whatsoever, have fallen under this baneful influence. We all know buildings and groups of buildings whose dreadful aspect we would walk blocks to avoid; buildings that inspire in the heart a devout wish that great Jove would intrust to our use the wielding of the seemingly aimless thunderbolt; buildings that have led us to fear that, whatever might become of organized society, anarchy was replacing what had been fondly called the principles of art. These exhibitions have done somewhat toward dispelling this gloomy foreboding and have brought visible proof that there remain yet seven thousand or less who have never bowed the knee to Baal or who, having followed after strange gods, have repented their idolatry and returned to a purer faith. We hope that it is to the attractiveness of the rendering that we are to ascribe some accepted compositions whose merits are not conspicuous, and which betray a lingering fondness for the flesh-pots of Egypt and the grace of the denuded pyramids. There are occasional examples of a too labored striving after the new and the picturesque — of a certain attitudinizing of the design, if we may so phrase it. But taken all in all there is a refreshing absence of brutality and a wholesome seeking for refinement that augur better times for architecture as an art, and we are little disposed to be severe on exceptions in view of the general merit.

Conventions of Ohio and Michigan Architects.

The sixth annual meeting of the Association of Ohio Architects, which will be held at Toledo, August 21, will be exceedingly interesting and enjoyable. The principal work will be the revision of the constitution and by-laws and the reformation of the State Association into a chapter of the American Institute. After the convention work is finished the members will take steamer to the Put-in-Bay islands where they will meet the Michigan State Association of Architects. The assembling of the latter association is informal, but it may take occasion to hold a joint session with that of Ohio. The Michigan architects will return to Detroit by way of Toledo, accompanying their Ohio friends. Aside from the business necessity for as many members as possible of either association to be present, the attractions in the way of a few days rest from routine work should induce the architects throughout Michigan, as well as Ohio, to attend this meeting. Michigan architects will leave Detroit Friday morning for Put-in-Bay by steamer. Ohio architects who reach Toledo before 10 o'clock on Thursday morning will find quarters at 504 Superior street.

A Guarantee Bond Given by Trades Unions.

While congratulating the carpenter contractors of Chicago upon their successful resistance to one of the most tyrannical and disreputable attempts to paralyze the building business, and the thorough discomfiture of the carpenters' union, we cannot but deprecate the lack of backbone so evident among the large mass of contractors in the building trades in New York. Instead of boldly saying that the methods of trades unions are barbarous and un-American, and refusing absolutely to recognize the existence of any such combination for unlawful purposes, deeming it better to go out of the business than be controlled by them, they have inch by inch given up ground to them that it will cost millions to regain, but that must be regained and independence of action obtained before they can hope to work undisturbed. The mason contractors of Chicago weakly yielded to the "beauties of arbitration" three years ago and are now governed by a union that allows of no infringement upon its assumed prerogative of absolute control. The carpenter contractors were also offered the "arbitration" bait, but, with perhaps a better understanding of what was meant, refused to place themselves in the position of arbitrating so broad a thing as personal freedom, which also involved a league against all labor outside of the union. By the most vigorous measures ever instituted by any association in the history of strikes, the city has been cleared of the crew of criminals that were paid by the union to attack the defenseless and the old, and only stopping short of murder for fear of a swift retribution and a hangman's rope. If strikes were so organized that only the striker and his immediate employer were interested or injured, and no damage to the unsympathetic workman, his employer or the general public were done, the outrages committed by unions might be tolerated and relief looked for in their mutual destruction, but a strike is never so circumscribed in its effect. A strike in New York at present will delay the completion of seventy schoolhouses and affect half a million innocent people. And the trades union has absolutely no excuse. No workman can point with pride to his union and say, "I receive higher wages through it," when its rules and practice destroy all freedom of action and exact by force what should only be won by skill. No union workman can be proud of an order that has force for its motto, hostility to all who do not join its ranks for its principle, and does not elevate him intellectually and cause him to depend upon increased skill rather than the strength of his organization for advancement. The laws of the land give unions all that they can ask in the way of liberty of action, and in return they are continually placing the business of the public in peril and the lives of individuals, whose only fault is that they desire to work for a living in their own way for those who may employ them, in jeopardy. It is time that the government stepped in and held unions accountable for their acts. No union should be allowed to organize or hold meetings, secret or otherwise, without depositing a good and sufficient bond, that could be sued against and collected from when sufficient evidence was established that the union was either directly or indirectly responsible for the damage done. If this were done workmen could recover for all time lost by strikes in other trades, and the unions, if they existed at all, would be controlled by responsible business men rather than by irresponsible agitators. Labor's antithesis, capital, should likewise be controlled, and combinations made a felony.

## Death of Architect Albert C. Nash.

ARCHITECT ALBERT C. NASH, of Cincinnati, died at his residence on Walnut Hills, July 15, 1890, aged 64 years.

Mr. Nash died in the fullness of years, honored and beloved by all who knew him. He was a close student and observer, and was, perhaps, the best posted man on scientific subjects of any one of his brethren in that city. He was peculiar in his habits, inasmuch as it has been his custom for years to work until about 3 o'clock in the morning and then, after taking a few hours' sleep, he would visit his building, and about noon each day would find him at his office. To the study of his plans he gave his personal attention and even in the preparation of his sketches he had a manner peculiar to himself, for he always made the preliminary sketches on paper that had been ruled by light blue lines into quarter inch squares, and this paper seldom saw the T square or the triangle, but would respond to the stroke of the architect's pencil and show forth the plan or the elevation or the perspective even that would nearly always meet the wishes of the owner.

From an architectural standpoint Mr. Nash was successful more in planning than in exterior or interior decoration. In his early architectural career he was led into what was then known as the Lake Shore Style, which certainly had nothing to recommend it but its name; like all diseases it had to run its course, and, fortunately for the profession, that course has been run, and those men who were its advocates a few decades ago are dying off, or, better still, are abandoning it for something better. If Mr. Nash had not got started on this unfortunate style, but instead had been rooted and grounded in the classics, he would have been one of the most powerful men of his times, for he seemed to have every faculty that fit men for those high positions that so many strive for and so few attain. He was a gentleman and a scholar. He was polite and warm-hearted, and being a ready speaker, he was always looked to to represent his brethren at any public gathering. He had a way of winning to himself all with whom he was thrown in contact. After nearly a quarter of a century of professional practice among us he passes away with his praise upon every lip. In those difficult positions that the architect is so often placed, i. e., as arbitrator between owner and builder, he carefully weighed all the facts and he had a judicial mind that enabled him to quickly and rightly arrive at a decision. When his mind was thus made up nothing could move him, and in truth his decisions were so carefully arrived at and so pleasantly rendered that they were always satisfactory and both parties felt that they had been justly dealt with.

Mr. Nash was the friend of the young architect, and more than one young man just starting on his professional career owes much to Mr. Nash because of timely advice, and of encouragement, and even of that more substantial commodity known as a "job," for he has been known to turn these over to young men when, for some cause or other, he could not or would not (for he has been known to refuse "jobs") execute the commissions offered to his charge.

Mr. Nash had the highest sense of personal honor and uprightness. He was the very soul of honor, and while requiring of the contractor a strict account of his stewardship, he ever accorded him his just dues. If the contractor was entitled to an "extra" he got it, but woe betide the contractor who endeavored to shirk his responsibilities, or who approached Mr. Nash with any proposition that had the appearance of a bribe in it. He held his own office force to a likewise strict account. He had, at one time, a superintendent who accepted a diamond stud from the contractors on a certain building (and this too after the building was completed) as a memento of his uniform kindness and impartiality, etc. Mr. Nash did not seem to understand how a superintendent could, conscientiously, accept a gift from those who should have been held to the letter of their contract, and so he at once discharged him.

While of late years, for reasons sufficient for himself, Mr. Nash seemed to lose interest in the Institute, yet he was an Institute man — believed in it and worked for it, and for many years was a member, and always a good one. For many years he was president of the Cincinnati Chapter, A. I. A., and was seldom so professionally busy as not to be able to attend to its duties; and was a good, firm and polite presiding officer; in short he had all those qualities that go to make a man in the fullest meaning of the word as the world understands it.

The architects of Cincinnati attended his funeral in a body, and President Samuel Hannaford appointed a committee who have reported the following memorial:

IN MEMORY OF A. C. NASH.

When A. C. Nash died the architectural profession lost a good man, and we who remain desire, the best we may, to record our testimony of his worth, though the best we can do, or say, will be but a feeble testimony and will come far short of his high character.

Mr. Nash was a man of the highest integrity and honor, to do a mean or small thing was foreign to his nature; he had the highest idea not only of personal honor and uprightness, but also of professional etiquette, and no one can point to a single act of his whereby any discredit was brought upon the profession. He was always regarded as a leader among us, and his advice was not only sought but followed. To the young architect he was a true and good adviser. As arbitrator between owner and contractor he was rigid and exact, faithful to his client and just to the contractor, and his decisions were seldom appealed from. His extensive practice of more than twenty years in this city bears a record of fewest mistakes and of the greatest number of successful achievements.

In accordance, therefore, with the above sentiments, we record our heartfelt loss in the death of Mr. Nash and we recommend that this memorial be spread upon the minutes of our society and be published in the architectural journals and the daily press.

SAMUEL HANNAFORD,
JAS. W. MCLAUGHLIN,
E. ANDERSON,
H. E. SITER,
CHAS. CRAPSEY,
} Committee Cincinnati Chapter, A. I. A.

## Views of an English Architect on Theater Construction.

BY ERNEST A. E. WOODROW, A. R. I. B. A.

PART I.

NOTWITHSTANDING the great advancement and improvements that have been made in buildings of this class in recent years, there is still much to be done to perfect the public buildings in which large numbers of people congregate, whether theaters, music halls, concert halls, or premises used for amusement, instruction or devotion.

Much has been done of late by the lessees and owners of London places of amusement to secure the safety and comfort of the public. New theaters and halls have risen to take the place of dangerous structures; old theaters have been rebuilt and remodeled; thousands of pounds have been spent by our managers to meet the requisitions of the late Board of Works and the London County Council; houses and lands adjoining their premises, mostly in our busiest thoroughfares, have been purchased at great outlay; staircases have been widened and additional exits provided to benefit a public knowing little or nothing of all that has been done for their security and their safety alone.

One cannot speak too highly of the managers for the steps they have taken in rebuilding, adding to or altering their premises, and in spending large sums of money, for which they see no corresponding return in their daily takings, but they have the consolation of knowing that the public will ever support the enterprising manager who can accommodate them in a building that has been rendered fit for their reception.

Not only have structural alterations been executed under the Metropolis Management and Building Act Amendment Act, but other important changes have been carried on voluntarily by the lessees. The advance of science has brought a valuable aid to them in the form of the electric light, which has been installed in many theaters and halls at considerable outlay. In some cases "power" has had to be specially provided and the scenery repainted to adapt it to the varied quality of the new light. The installation of the new fittings, both to auditorium and stage, and the extra nightly cost over and above that of gas, have all been additional expenses borne by lessees for the good of the public without any corresponding return.

Where electric light is used, we can now go to a theater without experiencing a feeling of suffocation. The risk of getting overheated and catching cold after by going into the night air, is avoided. Even a much more important object than this is attained — the reduction of fire risk. The old gas system was, and is, a bad one in every way. The proximity of gas, too often unprotected, to inflammable material, and the escape from the joints of the temporary pipes, which connect up the border and ground rows, are dangers that occur in the best supervised theaters. Where the electric light is used all this danger is avoided. Mr. John Hollingshead was the first to introduce the electric light in connection with theaters at the Gaiety. To Mr. D'Oyley Carte, however, we owe what may be considered the greatest benefit the theater-going public have experienced for many years, for he showed the practicability of lighting the entire auditorium and stage by electricity. What a deserved success Mr. Carte secured on the night of the private view at the Savoy can be well remembered, when all London assembled in the auditorium and on the stage and pronounced its favorable verdict. The majority of managers have

followed Mr. Carte's example, and it is now a common, would it were a universal, custom to light a theater throughout by electricity.

In dealing with places of public amusement, one should ever bear in mind that the one great object is to *prevent panic*. In order to do this, avoid fire risk, narrow passages, winding staircases, insufficient exits, crowded seating, and an unsuitable site.

Theaters, and all public buildings of this class, should be entirely fire resisting, having nothing in their construction that will readily ignite; by this means the ordinary methods of fire extinction, such as strict supervision and adequate appliances, will be found sufficient for the protection of the building. By giving careful consideration to the planning and disposition of the various parts and judicious choice of the materials for construction, a theater can, in spite of its being such a heavy fire risk, be made as safe as any other building, and the business of the house can be carried on with perfect security to both life and property.

The first thing, however, for the architect to learn is what is wanted in a theater and how a house should be arranged in every detail; until this is ascertained it is useless to try and plan a "safe" theater. It is a *sine qua non* that there must be a place for everything, and everything in its place; it is necessary to know what this everything is before the place for it can be provided, and it is only by becoming thoroughly acquainted with the *modus operandi* of "show" business that provision can be made to minimize and avoid the risks that follow. To become a successful theater architect one must almost qualify for a theatrical manager, or many of the minor details which create an easily worked and safe theater will be omitted in the plans.

Provide such means in planning a house so as to enable the audience and staff to get out of the building in the shortest possible time, at the slightest provocation; avoid all risks of panic. Panic has more victims than fire; many deaths occur where there is not a spark of fire in the building, and literally no danger whatever, this being in most cases due entirely to an ill constructed and badly planned house, unfit for the reception of numbers of people. Precautions against panic are more necessary than precautions against fire. Create confidence in the audience and half the battle is won; show to them their safety is in their own hands, that everything possible has been done to secure it for them by erecting a building from which they can find their way out with ease, by using materials of fire-resisting qualities, by dividing the house into many risks, and by providing separate departments for all the trades and businesses of the house.

If the public were better acquainted with the means of getting out of places of amusement, there is no doubt they would feel safer when visiting them. A great number enter with the idea that they could never find their way out if they wanted; this is not to be wondered at considering what some of the entrances are, that the entrances are not always the exits, and the exits not always in nightly use. What are commonly labeled "emergency" doors are too often found locked and bolted; they are therefore worse than useless. Everything should be done to inspire the audience with the idea that they could save themselves without hurting others in case of accident. To do this they should know the house and be able to find their way about it easily. One knows from personal feelings that when one is in a theater for the first time, one never has that sensation of security that is felt in a theater where one knows every passage and staircase by being a frequent visitor. In fact, a feeling of being at home is desirable. Of course, it is impossible for everyone to learn the run of the house, but much could be done to assist them. I advocated, some years ago, a plan of the building on the programmes showing the exits; this, in some instances, has since been done. Under the Various Power Act the late Board of Works had notices put on the walls "Exit—this way out," a most desirable precaution, but in addition to this I would have every door marked with its distinctive name, such as "Cloak Room," "Offices," "Lavatory," "Saloon," as the case might be, with "No exit by this door" underneath. Such notices as "In case of need," "Exit in case of fire," "In case of panic," "Emergency," "Alarm exit" should never be seen; they only suggest the presence of danger, which should never be brought to the minds of the audience. Omit all reference to the possibility of fire or panic and create confidence in the audience. All notices there directing the audience should be painted directly on the walls, not on separate placards, which are apt to get removed or torn down. Large plans of the building should be displayed in conspicuous parts for the benefit of those who have not programmes; in the intervals between the acts, people would out of curiosity examine these and unconsciously be storing up knowledge which might afterward be the saving of their lives.

Above all, study to obtain simplicity and uniformity of design in the plan. Let both sides of the house be as similar as possible; where there is a pit entrance on one side let there be a corresponding one on the other, where there is a gallery staircase on the right let there be a similar staircase on the left. Place all entrances and exits where they can be easily found every time the house is open to the public and have them all used at every performance. All seats should be numbered and the house licensed to hold that number, and no more admitted, under penalty of heavy fines; then the gangways would be left unobstructed. Messrs. Barnum and Bailey have been the first to show us how much better the public like to book their cheaper seats in advance than to crush, push and fight with each other to be the first to pass the pay box. Until the manager is fined passages will continue to be blocked up and the weak-minded man will be found who is willing to part with a sixpence to the obliging attendant for a camp stool or loose chair for his own personal convenience but danger to his fellow visitors. The public themselves are greatly to blame for the way in which they enter places of amusement. They are, however, easily led, and it is a pity other managers do not follow the example of the managers of the Shaftsbury and Savoy and compel the adoption of the *queue* system. Then, many who cannot afford the dearer seats of the house would be able to visit the cheaper parts in comfort and safety.

No theater should be allowed to remain open which is not constructed of fire-resisting material; the use of thin match boarding and canvas as partitions and divisions is still to be found in some places; where such is the case, how can any possibility of safety be entertained for either the building or those frequenting it. It is no good to patch up old wooden edifices with sheet iron and plugging and expect that the building will be rendered any safer. Where such places of entertainment exist they should be immediately closed, even if the cost is sustained by the public themselves. Better the destruction of fifty houses than the loss of one life.

Judgment in the choice of materials with which to construct the building requires such great care and study that too much importance cannot be placed upon this branch of the subject. The materials employed for the erection of places for the assembly of the public, whether for amusement, instruction or devotion must be in every sense of the words "the best of their several kinds." The scantlings or thicknesses must be far in excess of what would appear to be necessary for the actual and present work which they have to perform, so that they may resist any shock or pressure that may from any cause be brought to bear upon them. In short, a theater, or any building of public resort, must of necessity, in comparison with other buildings, be exceedingly costly. In this we refer only to structural parts, leaving out the decoration and fittings.

In dealing with buildings where human beings are packed, surely more care should be bestowed upon their construction than upon warehouses and factories. As long as there are cheap buildings, danger will be rife. Sometimes where a place of amusement is in a leading thoroughfare the ground floor is set aside for shops. One cannot express oneself too strongly against this; the reason it is done is, of course, to get the rent of the shops, swelling the receipts and thereby lessening the cost of the premises, but it robs the house of the very means of providing good entrances and exits which it would otherwise glory in. I say "glory in" advisedly, for every manager glories in his exits and will tell you he has better and more numerous exits than any other building in the town. Business or trade premises within the same block of buildings should never be allowed; it is only adding the risks of such trade to that of the theater or hall. The dangers accruing from the surrounding property are often as great as from a theater itself. In no case should persons be allowed to live or sleep, as is often done, in or about this class of building; it only increases the danger through the carelessness of the class of people who are likely to occupy the position of caretakers. The house should be left at night to a proper fire watch, not to persons who have been occupied in other callings all day and who, therefore, are in want of sleep at night.

In enlarging theaters and halls, adjacent premises are often taken in by knocking openings in party walls, perhaps for an extra scene dock or additional dressing rooms; the house next door is taken, and though never designed or built for the purposes of a public building it is brought into the same "risk." A building, or part of a building, not especially erected for "show" business should never be used for such purposes as it is nearly sure to be unfit for them.

PLANNING AND CONSTRUCTION.

*The site.*—In choosing a site for a theater, bear in mind that no house should be permitted to exist that is hemmed in on all sides,

with a narrow entrance as a frontage in a public thoroughfare. We too often thrust our places of amusement into cramped and crowded spaces, not caring as long as they are in the right quarter of the town for a paying concern. This, more frequently than not, is the first thought, and it is not considered if the site adapts itself to the requirements of a public building. True, it is difficult to obtain a building isolated on all four sides, and it is of course nonsense building a house where it will not pay, but never ought a place of public resort to be permitted where there are not wide streets running past three sides of the building, with the fourth side cut off from adjacent premises by a high party wall, many feet higher than the buildings on either side of it.

*Party walls.*—The most important points to be borne in mind in planning may be called the "party wall system"; have as many party walls in the building as possible, making thereby every division of the house a separate fire risk. Do not be content by merely dividing the stage from the auditorium, but isolate the work shops from the main building, the dressing rooms from the stage, the stage from the auditorium, the auditorium from the offices, cloak rooms, saloons, corridors, passages, etc. Divide each and every one of these and other sections of the house from all others, vertically, by strong brick walls, filling the openings with fire-resisting doors, made to close automatically and gradually and horizontally by fire-resisting floors; should a fire occur in any section it would be localized, and, if not extinguished, left to burn itself out where it originated, without danger to other parts of the building.

*Workshops.*—The position of the workshops should be such as to insure an entirely separate building, connected with the rest of the house by one opening only, which should be closed by a double fire-resisting door, a door which should on no account be allowed to be opened during the time of a performance. Should space permit, an open area should be left between the workshop and the theater proper, but where no area can be obtained, a thick brick party wall, passing through and above the roof, should divide the workshops from all other parts of the house. Provision should be made in the workshop section for paint room, carpenter's shop, property making room, and docks for scenery and property not in nightly use.

The painting gallery should be placed where a top studio light could be obtained, which lights should be protected from falling materials, timbers and sparks by strong wire guards. There is no special danger from scene painting, as is sometimes supposed; oil is not the medium employed, except when scenes are wanted for outdoor use to resist the weather, as in the cases of open air plays and scenic decorations such as used in exhibition grounds; but for all that, scene painting, as well as stage carpentering, is better done in a separate building.

The stage is too often used as a carpenter's shop, a custom which should never be allowed; the many dangers thus incurred need no pointing out, yet it is strange that seldom is a special room provided for the carpenter; this work in some houses used to be carried on over the auditorium ceiling, but, at any rate in London, this has been stopped. A special workshop for each trade should always be provided. The gasman, the electricians, the billposter, the needlewomen, the cleaners, should all have their respective rooms.

## Part II.

*Dressing rooms.*—Many theaters still have dressing rooms not fit for pig styes; dark holes under the stage, overheated boxes, made of match boarded partitions, on flies or stage floor, devoid of ventilation and light, serve as rooms in which the artists have to prepare for their performance. Lately, attention has been called to unsanitary dressing rooms, and typhoid, whether from this or other cause, has carried off its victims in the persons of such well-known actors as Stone and Ward. From how many minor ills our actresses and actors suffer, through ill conditioned dressing rooms, can easily be imagined when one tells how an actor relates that while on tour he had dressed standing on two bricks to keep out of stagnant water that floated about the dressing room floor. It should be remembered that too often dressing rooms are overcrowded, and that the heat from the glaring gas lights over each looking glass where the actor "makes up," renders the room unfit for occupation. The remedy is in the hands of the architect, and is complete ventilation; not only should as much window space as possible be provided, but also inlets and outlets for fresh air at the floor and ceiling levels. One cannot depend upon the occupants of the room to open the windows; there is always someone who mistakes fresh air for a draught, or one who much prefers the risk of a sore throat or a bad head from breathing impure air, to the admittance of the fresh air. The "dressers" employed in theaters seem to share in the dislike of fresh air, and will not open windows, which they could do when performers are engaged upon the stage. From these reasons it can be easily understood that automatic ventilation must be provided. Every dressing room should have a separate washing basin for each performer, with water laid on waste pipe properly trapped; this would avoid the slopping about of water, and also encourage cleanliness among the poorer classes, who are engaged as supers and extras in such large numbers at many places of entertainment. Gas or electric light should be placed over each looking glass, otherwise the artists will provide candles for their own convenience, and add greatly to the risk of fire. It is the fault of the management if they do, for not giving sufficient light for the artists to "make up" by, and the stage manager would be the first to cry out if the performers appeared on the stage imperfectly made up for their parts. Dressing rooms might be with convenience placed to the right and left of the stage, on one side for men, and the other for women, each block separated horizontally and vertically from the stage and the rest of the building by brick walls and fire-resisting floors. There should be separate staircases, and direct exit into the street from each section; the construction throughout should be fire-resisting, no more wood being used than is actually necessary for the provision of dressers, drawers and hanging cupboards for the disposal of the costumes in constant use. For the stock of costumes a special wardrobe should be provided. There should be no fireplaces in dressing rooms, hot water or hot air should be used for heating purposes.

*The stage.*—It would be impossible in a short paper to describe the construction of the stage with its various traps, sliders, flies, wings, borders, rows, gridirons and machinery. The stage floor and sliders must of necessity be of wood, on which to set the scenes with ease; but much of the machinery might be well made in iron and answer the purpose much better than the present clumsy bridges and traps, in which no alteration or advance has been made for many a long day.

On a level with the stage there should be scene docks and property docks for the stowage of the scenes and properties in constant use; all other scenes and properties should be placed in the workshop section above described. The mezzanine and cellars below the stage should be used for the purpose of the machinery only, and on no account should rubbish and scenes be allowed to accumulate under the stage. Here, too often, the band room is situated, and other rooms run up by the stage carpenter after the building has left the hands of the architect; as a rule, the band have to pass through the mezzanine to enter the orchestra. There should be a separate passage to the orchestra so that the band need never approach the precincts of the stage or pass through the auditorium. Proper accommodation must be supplied for band, bandmaster, stage manager, firemen, property master and all other sections of the staff employed behind the scenes.

The gridiron above the stage must be made sufficiently strong to carry the weight of the cloths, etc. Cases have been known where it has given way under the weight of the scenery, and let everything down in dangerous confusion on to the stage. The construction of the gridiron, flies and fly rails should be of iron. Proper staircases should be provided to enable the flymen to escape in cases of danger, and direct exit into the street should not be forgotten for the stage men and any who may be employed on the stage.

The stage should be divided from the auditorium by a thick, solid brick proscenium wall, which wall should go between the orchestra and the mezzanine and be arched over the opening, passing through and for some height, not less than 3 feet 6 inches above the highest part of the roofs of stage and auditorium. There need only be one opening in this wall in addition to the large or proscenium opening, namely, one pass door from the stage to the front for the acting manager. This opening should be protected on both sides of the walls by fire-resisting, self-closing doors. The stage should undoubtedly be cut off from the auditorium by some sort of fire-resisting or smoke-proof curtain. The failure of some of the iron curtains used on the continent and in America has shown that they are not always to be relied on, and it is not so long ago that one stuck in a London house and the audience had to depart without seeing the play. Thin iron curtains are really useless to retard fire, although for a time they would keep back the smoke and allow the auditorium to be cleared. Asbestos curtains have been advocated and seem far more fire-resisting in character than the iron curtains generally adopted. A thick cloth or curtain of such material as used for firemen's uniforms is of far more service than is imagined, if it were formed to run in iron grooves fixed to the proscenium wall, to lift bodily up to the gridiron level, made bag-shaped of double thickness with a small space

between each cloth and kept just damp inside by a spray of water trickling down every time the curtain is lowered. A cheap form of smoke-proof curtain, as good, perhaps, as any iron one, could be fitted to many a theater that has now no division between the stage and auditorium. Water curtains have been proposed, but as these could not be periodically tested on account of the destruction of property that would ensue they cannot be recommended. Whatever is adopted must be in constant use, for anything designed to act only in case of need or in the outbreak of fire is liable to be found wanting at the very moment it is needed. The fire curtain must be used nightly and between every act, to insure its being in working order and to let the audience know that it exists, helping thereby to strengthen that confidence of safety which is the cure of all fear and panic; for an emergency curtain coming down unexpectedly would be but the signal for a stampede.

Everything in and about a theater, to be of any good, must be in constant use. Automatic water sprays and appliances that depend upon the solder melting when a certain heat is attained, and all such like arrangements, cannot be condemned too strongly; the system is altogether wrong; you depend upon the existence of the very danger you are trying to overcome, to set the remedy at work; on the other hand, should the required temperature be attained through the heat of the gas on the stage, the solder would melt and the stage be souzed in a few minutes. Where automatic appliances are provided, people are apt to put such reliance in them that they ignore the ordinary precautions and become careless in their false security. From time to time the scenery should be coated with some of the various solutions recommended by our chemists; it is useless to do it once and then believe that the material coated or painted will never burn; woodwork, canvas and draperies require to be constantly treated with this coating.

*Gas and lighting.*—No precaution should be left untried to mitigate the dangers arising on the stage, for it is here we have to contend with the great risk. The use of the electric light has reduced the danger more than any other step that has yet been taken, but there are still hundreds of houses where an immense amount of gas is used nightly, too often in a careless manner, as the pipes are being constantly connected and disconnected during the performance; small escapes occur near naked lights which makes one wonder that accidents happen as seldom as they do. All gas lights must be protected by wire guards throughout the whole house, and an arrangement should also be used whereby the gas is automatically shut off when connections and disconnections are being made on the stage to the various battens, ground rows, etc. Where colored mediums are used, they should be of glass, not cotton material drawn tightly round the battens close to the gas, such as are often to be seen in ill-regulated theaters and halls.

The gas or electric light should be under the control of an expert with a sufficient staff of assistants. This man, during the whole time the house is open, should be stationed at the indicating plate fixed on one side of the stage near the curtain, on which plate every cock should be distinctly labeled, naming the section of the lighting system it governs, so that no error can possibly be made and the lights lowered or put out in the wrong part of the house. A mistake like this, slight in itself, might lead to dire consequences. It takes little to start a panic; once started it is hard to stop, and prevention is better than cure. Where gas is used, the lighting up should be left entirely to the gas man; the electric spark should be used and no matches or naked lights allowed. "The flash" system should be applied to all battens and hanging lights, avoiding the use of flaring spirits on cotton or wabbling cane among the inflammable sky borders.

Gas meters should be placed in a specially prepared and ventilated vault; the supply pipes should be of hard metal, left visible, and coated to prevent corrosion. There should be a stop cock on the main in the street near the stage door, at which entrance the key should be kept to cut off the gas from the house in case of fire. Separate meters should be fixed for each section of the house and the gas supply made distinct, and where frequented by the public, a dual system of supply should exist. In the parts of the house filled by the rougher classes, the lights should be incased, placed out of reach, or locked up; in all cases the tap should be *secret;* tampering with gas fittings is one of the most prolific sources of producing fire. There should be no jointed brackets or swinging pendants; every fitting should be fixed rigidly or protected by wire guards.

Sun burners are preferable to gaseliers, as they greatly assist the ventilation of the house by the up draught they create, carrying off the majority of the vitiated and heated air through the shaft provided for that purpose. Sun burners should be periodically cleansed and accumulated carbon removed; this also applies to all other gas fittings; a foul gas burner may at any time drop a spark on inflammable materials in dressing rooms or elsewhere.

Although the electric light is so much better than gas for lighting public buildings, it is not without its attending dangers. Recently it was reported at the Royal Opera House, Madrid, that an unusual stir was noticed on the stage, and the stage manager requested the audience to disperse, as an accident had occurred in the electric lighting machinery which made it impossible to go on with the performance. Much excitement and alarm is said to have been created behind the scenes among the employés, for two of their number had been injured by the electric wires. The fireman, however, was able to restore order and avert a panic. Electric lighting has its perils, but safety depends, as with gas, on having everything in proper order. Danger from fire arises from overcharged wires, where the current is sufficiently powerful to burn through the insulating material and fuse the wires. It was not long ago that the papers announced "A Theater Panic Averted," and describe that at the "Comedie Française" smoke arose during the performance at the footlights through overheated electric wires. This might have caused a serious panic. The electric wires in a public building should be installed in such a manner that they may easily be attended to when required by the staff and yet be out of reach of the public.

It is advisable not to depend entirely upon the gas or the electric system of lighting. In case of fire, too often the gas has to be turned off before the audience have a chance of leaving the building, in order that the escaping gas may not feed the flames. Darkness adds to the fearful horrors of panic, and all chance of escape perishes. The electric light is sometimes apt to fail, perhaps only for a moment, from such accidents as an overheated bearing, a broken belt, or other unforeseen cause. Although it may leave the house in darkness but for a few minutes, panic will prevail. To avoid all this, oil lamps should be placed about the building in all sections, in "front" and "behind." These lamps should, like the notices on the walls, indicate the direction of the exits with white lettering on red glass ground. They should be fed with oil, not spirit, and be lit before the admittance of the audience.

Provision for plenty of window space should be made in all parts; this would enable the use of artificial light being discontinued during the day, avoiding one of the great risks in such buildings, as the careless handling of lamps, candles and matches. Many are in the habit after striking a match of throwing down the semi-burnt incandescent end. Firemen say that this is the origin of a large number of fires. Carelessness over small matters such as this, leads to much loss of life and property.

It is a great blunder to make a place of public resort dark. In a house flooded by day with as much light as our varying climate will allow, the women whose duty it is to clean the "front" of the house would not have the opportunities of scamping their work, as they now do. Darkness means the accumulation of dirt and rubbish in all odd corners, ready to flare up on coming in contact with the slightest spark. A theater or hall, for everybody's comfort and safety should be kept clean, but as long as it is a dark hole it will be dirty and dangerous. Dirt, rubbish and trade refuse should be taken right off the premises every day before the performance. The habit of smoking in a theater, especially behind the scenes, should never be permitted, for fear some thoughtless person should throw down the end of a lighted cigar or cigarette. Smoking should not be allowed in "front," except where the house is specially prepared for it by having no inflammable material about on the floors or seats, or elsewhere. Windows have a still greater advantage, as they afford means of escape by reaching the outer air onto balconies or ladders, and they, therefore, should never be barred up, but left free to open. Loss of life in fires has frequently occurred through inability on the part of the firemen to obtain access through barred windows.

*Roof.*—There should be access from any one part of the roof to any other, with escape ladders leading to the ground. This is of the greatest value to the firemen. The construction of the roofs throughout should be of iron imbedded in concrete, finished on outside with ashphalt or other weather-resisting material. It has been found with wooden roofs over the stage, that the excessive heat and constant changes of temperature to which the roof is subject, desiccates the trusses and rafters, and converts them into something little better than touch wood. For this reason the gridiron floor should be of iron. Parapet walls should divide each "risk" in a similar manner to all party wall structures.

(*To be continued.*)

## Architectural Designing on a Logical Basis.*

THE relation of architecture to the exact sciences is far from being clearly defined. Combining, as it necessarily does, the elements of a science with those of an art, it has been looked upon askance, on the one hand as indefinite in its methods, on the other as occasionally too mechanical in its results.

As far as construction is concerned, graphical statics and formulas supply all needs with sufficient exactness; for architectural construction seldom reaches the inspirational stage, and when such an event occurs the assistance of an engineer is usually solicited.

But construction is not, apart from its necessary adequacy, the most important part of architecture, which is to be regarded for its æsthetic qualities. The objection can justly be made, that it is assumed that the inspiration of genius and the vague, intangible, æsthetic sense disarm all criticism. Æsthetic, curiously enough, however, is defined as "pertaining to the science of beauty," and science means certain knowledge; therefore it would seem that the principal thing desired in architectural study should be the certain knowledge of beauty.

The completeness of this knowledge is frequently questioned, and it is presumed that there is no fixed standard and no fixed set of laws by which beauty can be determined or gauged; a freedom from bondage, an erratic liberty of expression, being its prerogative by a sort of divine right, and essential to many of its forms. Yet upon observation there seems to be a very close relation between beauty and utility, between the pleasing thing and the necessary thing, and whatever is given to one at the expense of the other appears to injure both.

It is a perfectly easy matter to attempt to beautify at the expense of constructive expression, and just along this line lie most of the errors of æsthetic taste; but it is a very difficult matter to construct well at the expense of artistic expression, since the influence of the force of gravity alone requires an organic method, and a set of forms, masses and lines, which will be found more pleasurable to the eye in proportion as they more nearly perform their exact duty.

Whether this is from hereditary perception of instability, or from the tendency of like to attract like — man, a highly developed organism, being appealed to most strongly by the organic quality in his environment — is a subject for mental philosophy; that the fact exists is undeniable.

It follows, then, that there are two methods of making a building ugly; first, by a lack of development of its organic qualities, that is, by crude and inefficient expression of its constructive requirements, and, secondly, by the addition of non-essential forms, so-called artistic accessories, contrary to those requirements.

Conversely, there are two methods of making a building beautiful; by the fullest and most subtle development of constructive requirements, and by the application of forms which accentuate the organic qualities of the work.

Taking this for granted — and, certainly, but slight objection can be made to the general statement — the basis of all design must necessarily be a thorough sense of constructive requirements in order to possess the knowledge of the proper points to accentuate; and this should be, not a perception of a number of petty details, of minor threatening weaknesses, but a pervading sense of the great law governing all building, the law of gravitation.

The first necessity, then, is stability; which means that all main lines, except those of metal, must be horizontal or perpendicular, and that the bottom must not be incapable of supporting the top. This latter necessity has a marked influence upon the disposition and the size of openings, and creates the general rule that voids are preferably placed over voids and solids over solids.

The position of the center of gravity, real or apparent, creates the desire for more solids in proportion to openings at the lower part of the building than at the upper, and the consequent increase in number of openings in the upper part; and the same desire makes the two sides of a building of the same general density, preventing the weighting of one side more than the other.

This wish for apparent balance is the reason for symmetry, which is, practically, corresponding density on either side of a central axis, and which occasions, to a great degree, the planning of buildings on axes, and the subsequent balancing of the masses of the façade. As far as construction is concerned, this need of lateral balance is imaginary; but it is the first and only important departure of the æsthetic requirement from the constructive one, and has as its basis the feeling that all masses are most stable when equally distributed upon a horizontal plane.

Theoretically this is true, so that the artistic sense, in this case at least, seems to require more rigid adherence to the theoretical law of solids than does the constructive necessity; a rather suggestive fact to those who claim that art is irrational in its methods.

The wall, and columns carrying a lintel or a wall, are the simplest of constructive units, and are the antecedents of all early architectural forms until the arch makes its appearance.

To the wall, as it is built in horizontal courses, is applied the horizontal scheme of lines; to the column and its associate, the pier, the perpendicular scheme. In each the æsthetic method accents the constructional precedent; in one, by the use of accented jointings and by molded string-courses, cornices, etc.; in the other, by flutings and panels.

The horizontal lines carried through a façade are influenced in their relation to one another in size and distance apart by two desires: first, to make the lower part of a building seem stronger than the upper; secondly, to divide organic portions of the building one from another.

The first influence is felt in the grading of horizontal joints, so that the larger and wider stones are below, and the interval between the joints decreases toward the top, and, as in the use of more numerous openings as the wall ascends, there is produced a graded tone, a tone of comparative strength, expressed by a gradual shading toward the top of the building. The same result is obtained, frequently, by changing the texture of the stone, as, for instance, when rock or splitface is used in the first story, and ashlar above. The American custom of having the first story of buildings of a different and stronger material than is the rest of the façade is a logical result of the same reasoning.

The same diminution of tone appears in the scale of moldings as they ascend in position. There is, however, a prevalent idea, caused by the fusing of forms by distance, that all ornament near the eye should be smaller than that far from it; but while this may be perfectly true of the finish of detail, the breadth of treatment and interval of repeat and of decorative scheme should be greater at the base of a building than at its top.

The second desire affects the importance of the base, belt and cornice moldings.

It is usual, and has become an unchallenged custom, to consider a strong base and a strong cornice as essential features in an architectural design, and constructional derivations are constantly stated for both; but there seems to be little understanding of the æsthetic reason for the disposition and relative size of bands of moldings. This reason is, that each organic portion of a building should be defined at its boundaries, and these bands or belts are treated as so many borders confining parts of the building, and separating each part from its neighbor.

The scale of these borders depends upon the quantity of space confined within their parallel lines, and upon the importance of the change from one portion of the building to another; for instance, the base course and the cornice confine between them the entire mass of the façade, and are made, relatively, the strongest borders.

The lower belt courses are apt to confine higher masses of wall than the upper, and are consequently larger.

The entablature has its divisions of epistyle, frieze and cornice, defined by much smaller borders, as those divisions are secondary and of minor importance.

When portions of the same plane are divided to express organic parts, such as the different stories, etc., the belts have comparatively little width or projection; but when change of plane or change of form of the solid occurs, the moldings and decoration become at once more important and more insistent in emphasizing the change. For instance, the cap is inserted where the cylinder of the column changes to the plane surface of the epistyle, and the richness of bed-molding and soffit where the plane of the cornice breaks forward from the plane of the frieze. This is true of all changes from one geometric solid to another, whether in Classic, Gothic or Mohammedan architecture — the more fundamental the change, the firmer and richer become the division lines of molding defining the point of demarkation.

With the advent of the arch appears a new series of subjects for consideration, first of which is the fact that all arch lines must maintain their integrity throughout, and must be unworried by other lines impinging upon them. Secondly, the arch must be sufficiently weighted both at crown and at haunches, the æsthetic desire here, as is frequently found elsewhere, warning of constructive danger before it becomes actual.

The introduction of the curves of arches also brings up the question of the similarity of quality in detail on a façade; that is, that there should be an equality of strength expressed throughout, and not in one place a low flat arch with great thrust and little resistance, and in another a tall pointed arch with wedge-like obstinacy.

If such change of quantity of force were to be made, it should be disposed in such a way as to insure an equilibrium of forces; the whole façade should seem to be in equipoise, not with one portion weaker than another.

The same is to be said of the relative scale of detail, whether it is in openings, moldings or curving.

Wherever the planes of a solid change at a more obtuse angle than 135°, the change needs to be defined by moldings, etc.

Wherever geometric solids terminate in a point, it should be accented by some sort of finial; in fact, an exaggeration of visually uncertain constructive facts is one of the chief motives of architectural detail. This is demonstrated by the use of vaulting ribs, rosettes at intersections, triglyphs, gutters, crockets, finials, etc.

There is an axiom in attacking architectural design from a logical standpoint, that whatever quantity of material and consequent inertia is sacrificed, it is made up in vigor of constructive expression.

When the sturdy quality of the Doric is supplanted by the lighter and more graceful Ionic, the flutes of the column become deeper, the horizontal lines of the entablature draw closer together and become more frequent. When the vigorous columns of the Romanesque are multiplied, clustered, it is because the openings in the wall are becoming larger; and, at length, when the Gothic becomes an organism of masses in equilibrium, each pier, column, rib and arch has its purpose written upon it by insistent lines drawn in the direction of its resisting force.

But the inertia of horizontal masses is injured by being shot through with the nervous vigor of perpendicular supports, and the energy of ascending columns and piers is dulled by the heavy long lines of inert masses. Architecture is not a stuff with warp and woof; it needs a dominant motive, for otherwise the æsthetic sense suspects instability. To it exact equilibrium is uncertain equilibrium,

*"An attempt to reduce Architectural Designing to a Logical Basis." By C. Howard Walker, Instructor in Design in the Massachusetts Institute of Technology, in *Technology Quarterly* for May, 1890.

and it prefers the certainty of dominant horizontal or perpendicular lines to the plaid of conflicting forces. Above all, a building is an organism of which each part should perform its function, not only actually but manifestly, and architectural design should be devoted to denoting unmistakably how each function is performed.

Disguise is affectation. Frank exposition of construction is alone commendable, giving logical quality to design; and it is soon apparent that the æsthetic desire, once recognizing this fact, will suggest the most satisfactory construction, while at the same time it satisfies itself.

## Three Notable Architectural Exhibitions.

THREE notable exhibitions of architectural drawings, water colors and photographs have been held this past season in Philadelphia, Boston and Cincinnati under the auspices of the architectural clubs of the respective cities. Much might properly be said in detail of the exhibitions; but a study of the illustrated catalogues suggests some comments of a general bearing. Of course it is in a sense true that these exhibitions perform for those who visit them, and these catalogues for those who study them, much the same function that is performed by the illustrations in the various architectural journals. But there is a wide difference on one very vital point. It is the sphere of the professional journal to give to its readers, not only the best buildings of this and other times and countries, but also to keep him informed on current work, whether by way of important buildings erected or of designs submitted in important competitions. Only one in touch with the conduct of a professional journal knows how much editing is involved in the rejection of unworthy designs offered for publication; yet it is still true that, for very evident reasons, the journals are not in position to apply to published work the same rigid standard of excellence that is applied to candidature for admission to an exhibition. Thus while it should be possible to trace in the files of the journals the substantial progress of architectural work, there will creep in some absurdities and incongruities illustrative of prevailing modes or passing fads. On the contrary and most happily, the catalogues of the respective exhibitions place within reach of all members of the architectural profession a selected and sifted body of work, measurably free from vicious faults, of work which has successfully passed the aggressive scrutiny of a non-commercial, disinterested committee chosen from the most intelligent practitioners to be found in the several localities. We find, in fact, what we should rightly anticipate, that the catalogues exhibit work of a far higher degree of excellence than the average of the journals. To those who wish to see what real progress is being made in the development of American types from local conditions at the hands of the best workers, we hardly know an equally good presentation wherein are set forth realized works and aspirations for buildings for many uses. A conscientious comparison of these catalogues with the average work executed and published cannot fail to be provocative of beneficial results. Why this conspicuously persistent omission of types so much in vogue? Why this choice of the types selected? Are there no fruitful lessons here for the student of American work?

## Damages for Delay in Furnishing Materials.

A FREQUENT source of annoyance and consequent pecuniary damage, in the erection of buildings, is the failure of subcontractors to furnish materials when called for by the contract. Of course there is a legal remedy for damages occasioned by such delays, but through the somewhat prevalent laxity in drafting contracts, the damages recoverable are not always adequate.

The fundamental element of a contract is mutuality, and not only must the minds of the parties be in unison as to what is to be done, but the damages recoverable must be such as the parties to the contract might in the exercise of ordinary judgment expect would result from a breach thereof. As an illustration, suppose a watch to be sold upon a guaranty that it is a correct time-keeper. Relying upon that representation the buyer times himself by it to meet a railroad train. As a result of defects in the watch, if he misses his train and thereby loses a business appointment which results in financial loss to him, although such loss, in a broad view of the case, may seem to have resulted directly from the breach of warranty of the watch, no one would for a moment contend that such loss could be recovered under that warranty. That conclusion is arrived at as a matter of common sense, but as a matter of law it arises under the rule that no damages can be recovered which are not, or should not have been within the contemplation of the parties when making the contract. And so with damages for delay in furnishing building materials. They often arise from sources which were not anticipated when the contract was made, and so, not being reasonably expected, nor expressly provided for, cannot be recovered. Take as an example a contract for sash and window frames contracted to be delivered at a certain place upon a specified date. The failure to deliver such materials frequently causes a material delay in the completion of a building. If the building under construction is for rent it not infrequently happens that as a direct result of such default there is a loss of rents which it would seem should be charged to the defaulting contractor. It would seem that any intelligent material-man would be legally presumed to know that such damages would be consequential to his default. But such is not the fact. In order to charge such damages upon the defaulting material-man it must be shown that the material-man not only knew that the building was being constructed for rent, but he must be further charged with actual knowledge of the fact that such building was rented for occupancy at the time specified and that his default would entail that loss upon him.

The inequitable application of this rule is felt when the contractor himself has engaged to complete the building, without reservation, by a certain time. Upon him the damages of this delay may be charged, as he is presumed to contract with reference to all the facts and circumstances which may arise out of his contract or the subject of it. The reason for this is that he knows, or should know, that failure to complete a building prevents the use of it, and the inability to use it causes some one a loss. On the other hand the contractor for materials to be used in the building, unless specially charged with special liability, contracts with reference to the fact that the materials he engages to furnish may be purchased on the market, and the only damage, if any, which is contemplated under a general contract with him is the difference between the price at which he agrees to furnish the materials and the price which the contractor is obliged to pay for them if compelled to buy them elsewhere. It not infrequently happens that this measure of damages is inadequate for the contractor, as there are times when the state of the market with reference to various materials is such that after default by the subcontractor he cannot secure them in time to complete his contract without incurring consequential damages which, under the rules of law, he cannot charge back upon the contractor whose breach has entailed loss upon him.

In view of these facts the prudent contractor will draw his contract with material-men so that those damages which are liable to fall upon him may be charged to their proper source and not rest on his innocent pockets. This may always be done by expressly providing that those special damages, specifying them, which might result from a fault in the contract shall fall upon the subcontractor to the extent which the contractor is called upon to pay. Without such special provision no special damages will fall beyond the general contractor.

## Edinburgh Architectural Association.

THE annual general meeting of the Edinburgh Architectural Association was held May 29 in the Architectural Hall, 42 George street, Edinburgh, Scotland, Professor G. Baldwin Brown, president, in the chair. After the ballot for new members, and other preliminary business, Secretary T. Fairbairn read the report of the council on the past session, in which pleasure was expressed that they were now able to advance the higher aims of the association by publishing their "Transactions." It had long been regretted that the visits of the association to historical buildings remained unrecorded in a detailed permanent form, especially as many members had compiled, at great trouble to themselves, much valuable information, difficult to procure, and inaccessible to the great majority of the profession. It was hoped that in course of time the issues might become more numerous. Meanwhile, they were confined to historical papers, and to accounts of ancient building. During the session twenty-seven new members had been admitted, the number on the roll being now 273. The report further recorded the thanks of the association for various gifts they had received during the past session.

A. Dodds Fairbairn, C. A., next submitted the balance-sheet for the past session, which showed an excess of revenue over expenditure of £28 16s 6d, the balance in hand being now £192 6s 2d.

R. M. Cameron read his report on the library. Hippolyte J. Blanc submitted his reports of the Work-Class and Sketch-Book Committees, in the last of which an early issue of a new volume of the Sketch-Book was promised. All these reports were adopted by the meeting, and the prizes in the work-class were awarded.

The election of office bearers for the ensuing session was next proceeded with, the most important being:

President, John Kinross; past-president, Professor G. Baldwin Brown; vice-presidents, Archibald Macpherson and W. W. Robertson; honorary secretary, T. Fairbairn; honorary treasurer, J. Johnston, C. A.; honorary librarian, R. M. Cameron. Members of Council—J. Wallace, H. F. Kerr, D. W. Stevenson, R. S. A., J. McLachlan, D. MacGibbon and G. S. Aitken. The following are the Conveners of Committees, viz: Sketch-Book, Mr. Blanc; Publication, Mr. Aitken; Work-Class, John Watson; and Auditors, J. H. Tod, C. A., and M. A. Dodds Fairbairn, C. A.

The retiring president, Professor G. Baldwin Brown, then delivered his address, his subject being "The New Town of Edinburgh." Referring to the present position of the architectural profession in Scotland, he said questions of the organization of architects and of the architectural education of students were under discussion, and it was to be hoped that the outcome would be a closer union among members of the profession for the furtherance of common aims as well as improvements in the methods of art education. It would be premature to enter upon any detailed discussion of prospective arrangements, and accordingly a subject had been chosen for the address which had at once general historical importance, and also more immediate interest for members of the profession in Edinburgh. Mr. Brown then considered the "New Town of Edinburgh," both in itself as presenting standard examples of a particular style of architecture, and also in the relation to the general course of development through which cities had in all ages passed. After reviewing the characteristics of the old and new towns of Edinburgh in the light of historical parallels, the president said that the history of modern improvements in Edinburgh was not one which it was possible to look upon with unmixed satisfaction, for at almost every step there was evidence of narrowness of view or of interested motives influencing bodies or persons engaged in the common work. Parts had been shifted many times; sometimes the town council had been the attacking party, while at other times it had stood up to defend the city against individual lawlessness, or the aggressions of private or public corporations. For example, one of

the feuars of land in Charlotte Square early in the century had tried to deviate from the plan given by Robert Adam, and was defeated in an action at law brought by the town council, while on the other hand this very body had in 1772 been sued by the feuars of the new town to prevent their building on the land south of Princes street. The building of the houses at the corner of the North Bridge and Princes street, unsuccessfully resisted by Lord Cockburn and others, was another case in point, while at the present moment the town council was manfully resisting some schemes of a railway company which if carried on would inflict irreparable injury on certain parts of the city. In spite of these drawbacks, however, the new town of Edinburgh had got itself built, and had remained, considering all things, fairly well preserved. It was well, however, to remember that the negligence of a single generation of citizens might result in the injury or extinction of priceless architectural treasures, and the consequent degradation of the common civil life.

At the close of the paper some views were shown by the limelight, including photographs from old plans and drawings, facilities for the taking of which had been kindly granted by the city architect.

## Legal Notes.

SUFFICIENCY OF PETITION FOR MECHANIC'S LIEN.

Under the California statute it is sufficient to maintain a mechanic's lien to show in the petition that the materials were furnished a contractor and his assignee without setting forth the several amounts furnished to each. Harmon *vs.* San Francisco & S. K. R'y Co., Supreme Court of California, 23 Pac. Rep., 1024.

INJURY OF SERVANT FROM DEFECTIVE APPLIANCES.

Where a servant caused the injury of a fellow servant by means of defective appliances furnished for the common use of both, and the condition of which was known to the employer, the employer will be liable for the damage thus caused. Burns *vs.* Ocean S. S. Co., Supreme Court of Georgia, 11 S. E. Rep., 493.

NOTICE UNDER MECHANIC'S LIEN LAW.

To entitle one to the benefit of the mechanic's lien law of Pennsylvania, he must give notice of his intention to file a lien under the provision of the law to the owner, or reputed owner, of the property, or his agent, at the time of furnishing the materials or performing the work. Appeal of Stoner, Supreme Court of Pennsylvania, 19 At. Rep., 949.

MECHANIC'S LIEN NOT DEFEATED BY AGREEMENT AS TO PAYMENT.

In a suit to foreclose a mechanic's lien the defendant claimed that the contractor was to receive certain town lots in payment. The evidence failed to show that the material-man who is seeking to foreclose the lien ever agreed to accept anything but cash for his materials, and he is therefore entitled to his lien. Morris *vs.* Willetts, Supreme Court of Nebraska, 45 N. W. Rep., 784.

FORECLOSURE OF MECHANIC'S LIEN.

While the Georgia statute requires the claimant to show compliance with his contract in order to enforce his lien, such compliance need not appear of record in the lien as filed. There is no statutory intimation that material-men are not to have a lien as well when they take personal security as when they do not. Ford *vs.* Wilson, Supreme Court of Georgia, 11 S. E. Rep., 559.

FAILURE TO DELIVER MATERIALS CONTRACTED FOR.

Failure to deliver materials for the completion of a building within a reasonable time, no time being specified for their delivery, entitled the owner of the building to recover damages to the extent of a reasonable rental value of the building during the time its completion was delayed by such failure to deliver goods. Scribner *vs.* Jacobs, Supreme Court of New York, 9 N. Y. Supp., 856.

AFFIDAVIT IN CASE OF MECHANIC'S LIEN.

An affidavit under the mechanic's lien law of Florida that describes the property upon which the lien is claimed, as a steam sawmill located at a town or place called "Emerson," on the S. F. & W. R. R., fourteen miles south of Live Oak, Suwannee county, Florida, is sufficient, no lien being claimed on the land. Emerson *vs.* Gainey, Supreme Court of Florida, 7 S. Rep., 526.

SUFFICIENCY OF AFFIDAVIT FOR MECHANIC'S LIEN.

It is sufficient in an affidavit for a mechanic's lien if there appear enough in the description to enable a party familiar with the locality to identify the premises intended to be described with reasonable certainty, to the exclusion of others. Northwestern Cement & Concrete Pavement Company *vs.* Norwegian Danish Evangelical Lutheran Augsburg Seminary, Supreme Court of Minnesota, 45 N. W. Rep., 868.

HUSBAND AS AGENT OF WIFE.

Certain plumbing having been contracted for by a husband for his wife's house, and it being disputed that he acted by his wife's authority, it is competent to show that she talked with the man doing the work and expressed approval of the same, the Minnesota statute making her knowledge and consent evidence of his authority. McCarthy *vs.* Caldwell, Supreme Court of Minnesota, 45 N. W. Rep., 723.

KNOWLEDGE OF OWNER REQUIRED TO SUSTAIN MECHANIC'S LIEN.

Where a person other than the owner of land purchases material or employs labor in the erection of a building on such land, it is necessary that the notice for the lien should show, not merely that such other person is the owner of the land, but it must appear that such building or improvement was placed on such land with the knowledge of the actual owner. Allen *vs.* Rowe, Supreme Court of Oregon, 23 Pac. Rep., 901.

DAMAGES FOR BREACH OF PERSONAL SERVICES CONTRACT.

Where a person enters into a definite contract to render to another, and to no one else, personal services of such a nature that their loss to the employer and acquisition by another would cause injury not to be compensated for in damages, a breach of the contract in leaving the employer and contracting with a rival may be restrained by injunction. Metropolitan Exhibition Company *vs.* Ward, Supreme Court of New York, 9 N. Y. Supp., 779.

LIMITING LIABILITY OF CARRIER.

A railroad company cannot by a limitation in its bill of lading escape the common law liability of a carrier for damages resulting from its negligence, and if such a clause is inserted in the bill of lading and accepted by the shipper it will not be sustained unless it clearly appears that such limitation was accepted upon an express and valuable consideration. Chicago & N. W. R'y Co *vs.* Chapman, 24 N. E. Rep., 417. Supreme Court of Illinois.

SUB-CONTRACTOR'S LIENS.

Under laws N. Y. 1885, c. 342, Sec. 1, providing that the owner shall not be liable to pay, by reason of liens filed, "a greater sum than the price stipulated and agreed upon to be paid in such contract and remaining unpaid at the time of filing such lien, or, in case there is no contract, than the amount of the value of such labor and material then remaining unpaid," the premises are not liable to liens filed after work has been abandoned by a contractor who has received in full installments due according to the contract, whether or not the cost of completing the work would be less than the balance of the contract price, there being no provision for the completion of the work by the owner, nor any understanding that he should proceed with it. Larkin *vs.* McMullin, Court of Appeals of New York, 24 N. E. Rep., 447.

CONSTRUCTION OF PENALTY CLAUSE IN BUILDING CONTRACT.

The rule is that if damages result from the performance or omission of acts which are certain or can be determined by evidence, the sum which is stipulated in a contract to be paid in the event of the failure to perform such acts will be considered as a penalty and will not be enforced, but where such acts or omissions occasioning damage, produce a result which cannot be measured by a pecuniary standard, such stipulated sum will be considered in the law of liquidated damages and will be enforced. The provision in a building contract that the contractor shall pay the stipulated sum per day after a certain date if he fails to complete the building at the time designated, is in the nature of a penalty and not liquidated damages. Brennan *vs.* Clark, Supreme Court of Nebraska, 45 N. W. Rep., 472.

## Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.

The third meeting of the Executive Committee will be held at New York, August 18, at which matters will be transacted toward preparing for the annual convention. There have been a number of new members accepted by ballot during the year. The following circular was issued with the last ballot:

OFFICE OF THE SECRETARY,
THE ROOKERY, CHICAGO, July 22, 1890.

DEAR SIR,—Please return the inclosed ballot at your earliest convenience, so that it may be opened at the next meeting of the Executive Committee, which will be held in about two weeks.

The Executive Committee desires to inform all Fellows of the Institute that as (by the Constitution and By-Laws) all officers hold over till January 1, the fiscal year of the Institute will begin and end with this date. The payment of dues to the treasurer will be made accordingly.

The Executive Committee desires to call the attention of each Fellow of the Institute to the great importance of this year and of the coming convention upon the Institute's welfare.

Several Chapters of the Institute and local associations of the Western Association have failed to report to the secretary as to their reorganization under the Constitution and By-Laws. Such reorganization should at once take place, and full report made to the secretary. Another subject of greater importance is the reports from each Chapter to the next convention, which should be of the fullest description and should be in the hands of the secretary at least a week before the convention. Such reports are essential to the maintenance and growth of interest in the Institute.

It was to the secretary, as to other Fellows, a source of great regret that Chapter and Association reports did not appear with the published reports of the last convention.

Although acted upon by the Institute (pages 72 and 73 Proceedings), the original reports themselves did not reach the secretary's hands, and he has been unable to obtain them.

By an oversight the name of Professor Osborne, of Cornell University, Ithaca, New York, was not placed upon list of Committee on Education. Professor Osborne is a member of this committee and should have been so published.

JOHN W. ROOT, Secretary A. I. A.

## Our Illustrations.

Design for a hotel. Julius A. Schweinfurth, architect, Boston.

Residence for Mr. George A. Fowler, Kansas City, Mo. A. Van Brunt, architect.

Houses on Landon Court for Thomas Swobe, Esq., Omaha, Neb. Walker & Best, architects, Boston and Omaha.

Sketch "At Chinon, France," by John F. Jackson, Buffalo, N. Y.

Residences for Professor E. O. Excell, Chicago. Osborne J. Pierce, architect.

Fort Street Union Depot, Detroit, Mich. James Stewart & Co., architects, St. Louis, Mo. Material is to be red brick and stone. The building will be 138 feet on Third street and 125 on Fort. It will be built slow burning construction (iron columns and girders) with heavy wooden beams, about 6 feet centers, upon which will be laid a heavy shiplapped planking, and upon this the finished floor. The waiting rooms, restaurant and vestibule will have a white marble floor and the waiting room will be wainscoted with white marble to a

height of 8 feet. The waiting room will be 30 feet in height, and over the smaller rooms, ticket office, etc., a mezzanine story will be placed, giving space for offices and a railroad men's clubrooms. The upper portion of building will be used for offices. The emigrants' waiting room is in the basement as are also the engine and boiler rooms. The work of tearing down the old buildings upon the lot is now in progress, and work upon the foundations will be commenced as soon as the ground is cleared.

The roads interested in the depot are the Wabash, Flint & Pere Marquette, Canadian Pacific, and Detroit, Lansing & Northern.

PHOTOGRAVURE PLATES.

*(Issued only to subscribers for the Photogravure edition.)*

The Chittenden Library of Yale University, New Haven, Conn.; J. C. Cady & Co., architects, New York.

The Cloister, New Haven, Conn.; H. Edwards Ficken, architect, New York.

Residence of William Erastus Collins, Hartford, Conn.; William R. Emerson, architect, Boston.

Hotel Ontario, Salt Lake City, Utah; Adler & Sullivan, architects, Chicago.

Residence of Dr. S. E. Solly, Colorado Springs; Varian & Sterner, architects, Denver, Col.

"The Temple," now erecting on Monroe and La Salle streets, Chicago, under the auspices of the Woman's Christian Temperance Union; Burnham & Root, architects. The front of the building will be 192 feet in length on La Salle street and fourteen stories high. There will be four circular turrets 20 feet in diameter, extending up ten stories and then surmounted by a high-pitched roof for two stories. The building will be of steel construction and absolutely fireproof. The exterior will be of a pinkish brown granite for two stories, with cinnamon colored brick set in brown mortar above. A feature is a court differing in plan from any other in the city. It is 30 feet deep by 69 feet wide, extending from the top of the first story to the top of the building. There is also a court on the south and an alley 30 feet wide. No offices, except four on each floor, are lighted from the court. The interior will be handsomely finished in marble and mosaic. The main entrance on La Salle street will be the widest in the city and leads to a rotunda in which there will be eight elevators, forming an elipse. To the top of the skylight over this entrance will be a height of 196 feet from the pavement. The building will be occupied by a bank, offices and society rooms. The old foundations, which were put in at a cost of about $50,000 for Marshall Field, will be torn out, being useless for the present style of architecture. The Temple will cost $1,000,000 or more. The contract for the whole work has been taken by the George A. Fuller Company.

Building for the Kelsey Oriental Bath Company, Philadelphia, Pa; Wilson Eyre, Jr., architect.

## Personal.

ARCHITECTS DAVES & HALBERT, of Schenectady, New York, have opened an office in that city and would be pleased to receive catalogues and office samples from manufacturers of building materials.

## Building Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, Ill., August 10, 1890.

A favorable condition of things exists in financial, manufacturing, commercial and building trade circles. There has been no slowing up in new work and new enterprises, and no occasion for any restriction of enterprise. Margins, though not at all gratifying, are sufficient to attract fully as much capital as can safely enter into activity. Manufacturers throughout the country are running full time, or overtime. Commercial men all speak with confidence of the results of the first half-year's dealing, and of the prospects for the last half of 1890. Railroad builders have been pushing work moderately, but scores of schemes are being carefully nursed for future attention. Building activity has been general in all sections, and when the figures of 1890 are added up it will be found that this has been an exceptional year. The most encouraging and satisfactory work in the building line has been done in the smaller cities and towns throughout the country. The manufacturers of building material are crowded with contracts for material to be furnished during the next five months. The lumber manufacturers and dealers are doing a heavy business. Competition is keen, but failures are few. The iron makers have had seven good months and expect five better ones. Their mills and furnaces have been kept busy, and according to the very recently published figures in the trade there is not a three weeks' supply of crude iron in the country. Great engineering enterprises are springing up and capital is not lagging far behind them.

Business is being done upon a legitimate and safe basis, and opportunities for new enterprises are multiplying. Great work is being donc in the far West and in the South, and enterprise in the East is showing itself capable of greater work than it has yet accomplished. The currency has been increased to the extent of $70,000,000 during the past year, and it is figured out that the increase during the next twelve months will run from $100,000,000 to $120,000,000. There is an intimate relationship between an abundant supply of money and prosperity, and there certainly should be no reason for complaint during the next twelve months as to stringency. The money lenders are always prepared to take advantage of the necessities of borrowers, but while the government pursues its bond-buying policy in a liberal way, the possibility of Wall street cornering the country is remote. The prospects for the fall are very favorable indeed. Loud complaints come from the farming communities, as to high prices for what they buy and low prices for what they have to sell; and one of the outcomes of this condition of things is the growth of organization among the farming interests for the amelioration of their condition. The industries generally are thriving and capital is edging its way into every one of them.

## Synopsis of Building News.

**Anniston, Ala.**—Architects Chisolm & Green: For Messrs. Smith Bros., of Sylacauga, Ala., two-story brick building, gravel roof, size 100 by 100 feet; cost $10,000. For A. B. Lovejoy, a two-story brick residence, 50 by 100 feet; cost $5,000. For the Sylacauga bank, a two-story brick building, slate roof, size 23 by 79 feet; cost $5,000. For L. Lamar, at Selma, Ala., a two-story frame residence; cost $10,000. For the Piedmont Bank Company, a two-story bank, brick, tin roof, size 25 by 100 feet; cost $6,000.

**Chicago, Ill.**—Architect F. R. Schock reports a two-story residence on Forrestville avenue, near Forty-eighth street, for O. F. Lindman. It will have a stone front, hot water heating, stained, plate and beveled glass, etc., and cost $12,000. For J. J. Lindman, on Kimbark avenue, near Forty-eighth street, a two-story basement and attic residence, stone front, hot water heating, etc.; to cost $7,000. For A. Quinn, a two-story basement and attic residence, at Austin, frame, stone basement, hot water heating, bathrooms, closets, mantels, etc.; to cost $7,500. For J. J. McAuley, a two-story frame dwelling at Austin, frame, stone basement, furnace, bathroom, etc.; cost $4,000. For M. Robertson, at Austin, a two-story frame dwelling, with stone basement, furnace, etc.; to cost $3,200.

Architects Snyder & Nothnagel: For M. A. Richardson Company, a five-story warehouse, to be built corner of Washington and Curtis streets, pressed brick and stone front; steam heat, elevator, etc.; cost $40,000; making plans. The same architects are letting contracts for a six-story apartment building to be built on Michigan avenue, near Thirtieth street, for W. L. Blood; the first story and basement will be of buff Bedford stone, with ornamental pressed brick above, copper bays and cornices; will put in steam heat, elevator, electric light, etc.; the cost will be $160,000.

Architect R. T. Newberry: For Gen. Walter C. Newberry, a four-story and basement malt house, to cost $10,000; making plans. Also taking bids for a five-story warehouse to be built at 141 to 143 Ontario street for the same owner; the front to be of Tiffany pressed brick and terra-cotta; cost about $20,000.

Architect C. E. Quiner: For Brown & Lindquist, two three-story and basement flat buildings on southwest corner of Ellis avenue and Forty-fourth place; buff Bedford stone fronts, with galvanized iron bays, bathrooms, closets, mantels, laundry sinks and fuel gas arrangements; cost $22,000.

Architect F. B. Townsend: For F. B. Ogden, a two-story residence on Nicollet avenue, to have stone front, stained, beveled and plate glass, furnace and modern improvements; cost $5,000. For Mrs. Stattman a two-story frame dwelling at Argyle Park; stone basement, furnace, etc.; to cost $1,500.

Architect J. E. O. Pridmore: For William Jones, a three-story store and flat building on Forty-third street; Bedford stone first story and Tiffany pressed brick with copper bays above; cost $25,000. For Oliver Nelson a three-story residence on Prairie Avenue near Thirty-sixth street. To have a front of Dunreath Variegated stone, and cost $10,000. For Hamilton Robinson, working on plans for an Indian bungalow residence to be erected at Glencoe.

Adolphus Griesser & Maritzen: Preparing plans for the Illinois Brewing Company's plant. Main building seven stories, 245 by 105 feet in size; to be of steel construction and fireproof; have grain elevator, ice machine, etc.; the cost will be about $300,000. The same architects are making plans for an entirely new plant for Lebanon, Kentucky. To be of fireproof construction and have a capacity of fifty thousand barrels; cost $150,000. They are also getting out plans for a brewery plant, malt house, etc., of fifty thousand barrels capacity; to cost $150,000; to be erected at Evansville, Ind. For the Texas Brewing Company: they are working on plans for a very fine brewery plant to be erected at Fort Worth. The main building will be six stories, with a frontage of 200 feet by 100 feet deep and 120 high. It will be designed like a fort and will have a handsome front with a tower 150 feet high. The construction will be of steel and strictly fireproof; the cost will be $250,000. They are also planning an eighty thousand bushel elevator for the Schoenhoffen Brewing Company. For the Bartholomae-Roesing Company, a four-story warehouse, size 100 by 60 feet; to be of steel construction and have Indiana pressed brick and stone front, with handsome tower on the corner; the cost will be $70,000.

Architect Julius Wegman is preparing plans for the St. Monica Catholic Church and parochial residence to be erected on the corner of Thirty-fifth and Dearborn streets. Pressed brick and terra-cotta; interior finish to be in Georgia pine, to have steam heat, etc.; the cost, including a tower 200 feet high, will be about $50,000. He is also making plans for the Odd Fellows' Orphans Home to be erected at Lincoln, Illinois. The plans include a school, chapel, auditorium, gymnasium, library, infirmary, workshop, etc.; the cost will be about $75,000.

Architect Julius H. Hubert: For August Gross, making plans for a three-story store and flat building, to be built on Wells street near North avenue, of St. Louis pressed brick and Bedford stone. For F. H. Remier, a four-story flat building corner of Pearson and Rush streets, of Bedford stone, to have steam heat, gas stoves, ranges, bathrooms, closets, tile mantels, etc.; cost $25,000. Also preparing plans for a four-story store and flat building to be built on Wentworth avenue, near Thirty-first street, to have a front of St. Louis pressed brick and Bedford stone; cost $15,000.

Architect C. S. Corwin: For J. F. Stephens, letting contracts on a four-story store and flat building, to be erected at 415 West Madison street, to have a Tiffany pressed brick front with terra-cotta and copper bay trimmings; cost $15,000.

Architect Theodor Lewandowski: For the Charles T. Ogren Brewing Company, making plans for a five-story brewery to be erected on Shober street near Division; to be of Indiana pressed brick and Lemont stone, and cost $40,000. For Ignatz Kushinski, a three-story flat building at 137 Augusta street, of Tiffany pressed brick and Connecticut brownstone, to cost $7,500. For John P. Utrod, a three-story flat building at 128 Fry street; St. Louis pressed brick and stone. For H. R. Wazko, a four-story flat building corner of Dickson and Blanche streets; St. Louis pressed brick and Prentiss brownstone; cost $12,000. For Hernan Peters, a two-story dwelling at 91 Keenon street, of St. Louis pressed brick and Euclid stone. For St. Bonifacius Parish, corner of Noble and Cornell streets, a church basement, 94 by 125 feet, of Indiana pressed brick and stone.

Architect G. Isaacson is letting contracts for St. Paul's Norwegian Evangelical church, to be erected on North avenue, between Leavitt and Shober streets; it will be built of St. Louis pressed brick and Bedford stone; have steam heat, pews, etc., and cost $25,000.

Architects Patton & Fisher: For W. A. Dunshee, preparing plans for a six-story apartment building, to be erected on Oakwood boulevard, east of Vincennes avenue, to be of granite first story and pressed brick and terra-cotta above; steam heat, elevators, marble wainscoting, etc.; cost $60,000. They are also preparing plans for the college chapel to be erected at Beloit, Wisconsin, to be constructed of granite with sandstone trimmings; have hardwood interior, stained glass, etc.; cost $30,000.

Architects Ostling Brothers: For R. S. Elder, preparing plans for a two-story apartment building to be erected on Oakdale avenue near Evanston avenue; Rockfaced stone front, stained, plate and beveled glass, steam heat, hardwood finish, tiled floors, etc.; cost $30,000.

Architect H. T. Kley is preparing plans for a fine two-story residence, to have stone front, hot water heating, stained, plate and beveled glass, slate roof, etc., and cost $20,000.

Architects Thiel & Lang: For Schlitt Brewing Company, planning a four-story store to be erected corner of Rockwell street and North avenue; St. Louis pressed brick and stone; cost $10,000.

Architect Gregory Vigeant is getting out plans for a two-story residence to be erected on Hawthorn place near the Lake Shore Drive; to be of stone all round, have hot water heating, and cost $20,000.

Architects Lutken & Thisslew are making plans for three residences, to be erected on Ewing place near Wicker park; two will have Portage stone fronts and one will be buff Bedford; will put in steam heat and all the improvements; cost about $25,000.

Architect E. H. Turnock: For Miss Mary Hartney, Fortieth and State streets, stores and flats, 50 by 94 feet, three stories, pressed brick, stone trimming and sheet metal bays, German pine finish; cost $10,000. For Mr. Chas. Jungan, Evanston, Illinois, residence, two-story and stone basement; hardwood interior, hot water heating; cost $6,000. Also residence for M. L. Kafrice, West Hinsdale, two-story and stone basement; furnace heat; cost $3,500. Also flats for Mr. Reynolds, Fiftieth street and Wabash, two-story and basement: Bedford stone front, German pine finish; cost $1,500. Frame church at Irving Park, to seat 500, class rooms, library, pastor's study, furnace heat; cost $5,000.

**Cincinnati, Ohio.**—Reported by Lawrence Mendenhall.

The carpenters' strike, which was on when my last letter was written, has gone down into history. By August 1 the firms will all be working nine hours per day with ten hours' pay. We are all familiar with the fable of the grasshopper which danced all summer, thinking about nothing except the pleasures of the present. When winter came it realized too late how foolish it had been, and at last from starvation it dies, and departs for that bourn from which no grasshopper ever returns, and the rasping of its wings is heard no more (for a season). I sincerely trust that there will be no suffering among the carpenters, but how will the loss of nearly $78,000 be met? I admire a fight for principle, but common sense is a first-class commodity to own and keep on hand. While the carpenters effected a compromise, yet I think that the same end could have been attained with far less loss. The strike presents lessons that are well to learn, namely, first, capital is bound to respect labor's rights; second, labor should be careful to guard their rights, and use judgment and justice in their assertion; third, that *right* makes might, and *not* the boycott, or stubbornness.

Messrs. Samuel Hannaford & Sons have moved into new quarters in the Hulbert Building, Sixth and Vine. They have taken the entire upper floor, 58 by 90 feet, and have light on each side. It is an immense improvement over their old office, and with increased conveniences, increased business is sure to follow. Architectural circles were grieved last month (July) over the death of one of their oldest and most respected professional brothers, Mr. A. C. Nash. Quiet modesty was a most prominent trait in Mr. Nash's character, and drew to him many friends. His ability as an architect could not be questioned, and Cincinnati, as well as other cities, contains many buildings which will stand as monuments of his genius. *Requiescat in pace*, and with love may we add "*memoria in eterna*."

Architect Edwin Anderson reports the following: For J. B. Coats, Bloomington, Illinois, a carriage factory; materials, brick, steam elevator, tin roof, etc.; size 100 by 125. For D. G. Andre, Esq., Connersville, Indiana, a society hall, an addition to Andre's Opera House; write to architect. For G. M. Roe, Esq., a frame residence with pine finish, slate roof, blinds, mantels, etc.

Architect S. S. Godley reports as follows: For Charles Fleischman, Esq., Plum & Perry (office), Cincinnati, a brick residence remodeled; materials: brick, furnaces, stained glass, mantels, slate roof, hardwood, blinds, etc.; cost $8,000. Also for the same party, a brick and frame stable; to cost $6,500. For Cincinnati Omnibus Co., a brick stable, 100 by 100, two stories high. Complete stable fittings; cost $10,000. For J. S. Moffatt, Troy, Tenn., a store; materials: stock brick, tin roof, counters, office fittings; cost $6,000. Rebuilding a part of the tannery belonging to Cincinnati Oak Leather Co. The buildings will be of brick, with frame shed, 50 by 50 and 100 by 100 respectively. Machinery will be needed; cost $10,000. Additions to the brick schoolhouse at the town of Cleves, Ohio. Blackboards and desks will be needed; cost $5,000.

Architect J. W. McLaughlin reports: For Mr. John Rettig, a residence. Materials: brick, tiling, furnaces, hardwood finish, stained glass, gas, etc.; cost $6,000.

Architect W. W. Franklin reports: For Thos. M. Worcester, care of Bromwell Manufacturing Co., City, a residence. Materials: brick, furnaces, slate, stained glass, pine finish, mantels, inside blinds, etc.: cost $8,000.

Wm. Martin Aiken reports: For Miami University, Oxford, Ohio, a laboratory. Materials: brick, stone trimmings, steam heat, plate and stained glass, hardwood finish, etc.; cost $12,000.

Architect A. O. Elzner reports: For Chas. H. Kellogg, Jr. (Third Nat. Bank), a residence. Materials: pressed brick, furnaces, plate and stained glass, hardwood finish, blinds, etc.: cost $16,000. For Stern, Mayer & Co., Cincinnati, rebuilding store. Materials: stone, steam heat, elevators, tin roof, hardwood finish, vaults, etc.; cost $30,000. For Rheinstrom Bros., City, a warehouse and distillery. Materials: brick, iron, steam heat, elevators, plumbing, composition roof, etc.; cost $60,000. For Mr. Leopold Feiss, Esq., Cincinnati, a residence. Materials: pressed brick, furnaces, hardwood, dumb-waiters, electric bells, slate roof, etc.; cost $14,000.

Architects Crapsey & Brown report as follows: For the M. E. Church at Morristown, Tenn., a dormitory and school; to cost $25,000. For the Wesleyan College, Delaware, Ohio, another college building; cost $15,000. For the Fostoria (Ohio) Presbyterian Church, a stone edifice with slate and tile roof; cost $25,000. For the United Presbyterian Church, at Kenton, Ohio, a brick and stone edifice with slate roof; cost $9,000.

Architect Henry E. Siter reports: For Jos. Block, Esq., a residence. Materials: brick, slate roof, hardwood finish, plumbing, mantels, stained glass, etc.; cost $10,000. Mr. Siter is also completing the plans and superintending the addition to the St. Nicholas Hotel.

**Cleveland, Ohio.**—Architect B. F. VanDevelde: For Max Cohen, a three-story store and apartment building, brick; size 46 by 76 feet; cost $9,000. For Bishop Rich Gilmore, two-story dwelling; size 28 by 62 feet; cost $8,000.

Architect G. H. Hammond: For the Bethel Union, a two-story brick addition; cost $5,100.

Architect J. T. Watterson: For the Otis Iron and Steel Co., a one-story brick addition; size 100 by 83 feet; cost $1,000. For the Paige Car Wheel Co., a one-story brick and stone addition to works; size 53 by 143 feet; cost $5,000.

Architect A. M. Smith: For O. D. Meyer, a two-story dwelling, brick and stone; size 37 by 70 feet; cost $15,000. For Dr. D. H. Berkwith, a two-story frame dwelling; size 39 by 55 feet; cost $6,000.

Architects Cudell & Richardson: For the Little Sisters of the Poor, a four-story home, brick and stone; cost $35,000.

Architect C. F. Schweinfurth: For the University Training School, a three-story school, brick and stone; size 50 by 56 feet; cost $40,000.

Architect S. R. Badgley: For the Presbyterian Church, a one-story brick and stone church; size 24 by 70 feet; cost $6,000.

Architect A. Mitermiler: For the Hungarian Hall Co., a two-story hall and stores, brick and stone; size 50 by 120 feet; cost $15,500.

Architects Coburn & Barnum: For John D. Rockefeller, two two-story frame dwellings; size 42 by 81 feet each; cost $22,000.

Architects names not reported: For Frederick Hoffner, a three-story store and dwelling, brick and stone; size, 22 by 67 feet; cost $5,000. For L. M. Southern, a two-story frame dwelling, size 27 by 44 feet; cost $4,800. For Everhart Manufacturing Co., a two-story shop, brick and stone; size 48 by 88 feet; cost $5,000. For the Cleveland Rolling Mill Co., a one-story machine and boiler shop, brick and stone; size 48 by 98 feet; cost $5,000. For the Walker Manufacturing Co., brick and stone shops; cost $60,000.

110 Permits issued during July, 1890, Alterations..... $ 83,663
261 " " " " " Wooden..... 263,546
19 " " " " " Brick and stone..... 226,900
390 " " " " " Total..... $ 574,109

It is rather dull about the architects' offices as to new work; but there is great activity outside and mills and crafts are all pushed.

**Council Bluffs, Iowa.**—Architects F. M. Ellis & Co. have prepared plans for a Methodist church; brick and granite, slate roof; cost $50,000.

**Dayton, Ohio.**—Architects Williams & Otter have plans for a new schoolhouse, to be erected at Gettysburgh, Ohio.

**Denver, Colo.**—The trustees of the Christian Church have let contract for foundations of their new church, to cost, completed, $50,000.

Architect Roeschlaub: For W. B. Palmer, a brick residence, with stone trimmings; interior to be finished in hardwood; cost $14,460; contractors, John Monat Lumber Company.

Architects Varian & Sterner: For the Union Depot, a $30,000 addition to depot. For Dr. A. K. Morris, a stone and brick business block, to cost $20,000.

**Detroit, Mich.**—Architects Malcomson & Higginbotham: For the Central Church of Christ, a one-story brick and stone church, with slate roof, size 50 by 125 feet; cost $25,000. For the Hotel Benedict, a six-story addition, brick, size 60 by 80 feet; cost $25,000.

Architects Donaldson & Meier: For the Brush estate, a three-story brick store, tin roof, size 23 by 110 feet; cost $18,000.

Architects M. L. Smith & Sons: For J. L. Hudson, a six-story brick store, tin roof, size 211 by 100 feet; cost $200,000.

Architect A. Bloquelle: For S. Strelenger, a three-story brick brewery, size 44 by 55 feet; cost $55,500. For Thos. Schick, a two-story brick dwelling, slate roof, size 32 by 63 feet; cost $7,000.

Architects A. C. Varney & Co.: For Parke, Davis & Co., a three-story brick laboratory, tin roof, size 200 by 275 feet; cost $55,000. For Mr. Sullivan, three two-story brick store and dwellings, size 50 by 76 feet; cost $14,000. For Mrs. Lewis, a two-story double brick dwelling, slate roof, size 40 by 62 feet; cost $7,000. For Mr. Evans, a two-story brick dwelling, slate roof, size 36 by 63 feet; cost $7,400. Work is very dull here just at present, not having yet recovered from the set back caused by the strikes, although there is a great deal in prospect which will probably be commenced in the fall.

**Findlay, Ohio.**—The Coroy Brewing Company will erect an addition, to cost $100,000.

Architect George Horn: For James Stackhouse, a four-story hotel, brick, size 60 by 200 feet; cost $20,000.

**Kansas City, Mo.**—Architect H. Kemp has prepared plans for hotel and business block for Col. G. W. Warden. The building will be of brick, tin roof, and all modern improvements.

**Kearney, Neb.**—Architect J. Hodgson, Jr., of Omaha, Nebraska, has prepared plans for a hotel building to be erected by the Midland Hotel Company at a cost of $100,000.

**Minneapolis, Minn.**—Building permits issued during July: George A. Cummings, three dwellings, $6,000; Sarah K. Carr, double dwelling, $5,000; Lowry Hill Chapel, church, $14,000; Chicago, St. Paul, Minneapolis & Omaha Railway, round house, $18,000; George Huhn, repairs, $5,000; K. B. Finley, dwelling, $5,000; Minneapolis Distilling Company, extra story to warehouse, $10,000; Young Men's Christian Association, building, $137,000; O. H. Brown, two dwellings, $8,000; C. A. Whitney, dwelling, $8,000: Minneapolis Industrial Exposition, alterations on building, $10,000; J. T. Thurman, dwelling, $7,500; Andrew McIsic, four dwellings, $8,000; H. N. Avery, four dwellings, $8,000; Jacob Stoft, brick store and dwelling, $5,000; M. Hanson, dwelling, $4,500; George M. McGregor, five dwellings, $17,500; G. B. Coffin, three dwellings, $7,500; Holy Trinity Church, addition, $7,000; Elizabeth C. Dowdell, brick store and flats, $20,000.

**Omaha, Neb.**—Work on the Streetsville school building will be commenced soon, and the building will be ready for occupancy by December.

Architect F. M. Ellis has prepared plans for a seven-flat building for Daniel Carriag; contractors, Hughes & Co. Also for J. L. Byers, a store and office building, to cost about $40,000.

**Pittsburgh, Pa.**—Architect J. E. Obitz: For Mrs. Huntsman, a two-story brick house; cost $5,500. For R. S. Frazier, a two-story brick dwelling, size 31 by 55 feet, slate roof; cost $6,000.

Architect E. E. Miller: For H. J. Murdock, Jr., a two-story frame residence; also for the Christian Church at Mansfield, a $5,000 frame church.

Architect A. Peebles: For the Oliver Iron & Steel Company, a two-story brick machine shop, size 243 by 84 feet, slate roof; cost $65,000.

Architect J. W. Offerman: For Mr. Maloney, a three-story business building; estimated cost $10,000.

Architect James T. Steen: For Dr. C. W. Stranahan, of Erie, Pennsylvania, a pressed brick residence with stone trimmings; all modern improvements; cost $20,000.

Architects Longfellow, Alden & Harlow: For the Farmers' Deposit National Bank, a two-story bank, size 21 by 40 feet, stone, tile roof; cost $19,400; contractors, A. & S. Wilson.

Architect George S. Orth: For E. M. Ferguson, a seven-story office and store building, size 98 by 85 feet, brick, with tin roof; cost $149,900.

**Portland, Ore.**—Architect M. Howe: For the Union Depot, a large new depot; work to be commenced at once.

Contract for the new school building on Portland Heights has been let to G. W. Gordon; cost $9,985.

A Chamber of Commerce building to cost from $300,000 to $500,000 is to be erected on the corner of Third and Stark streets. Plans have been submitted, but there is a difference of opinion as to whether a fireproof, slow-burning or non-fireproof building is what is wanted.

A new City Hall, to cost $500,000, is mentioned as one of the improvements on which work is soon to begin.

**Rochester, N. Y.**—Thomas Nolan and E. B. Nolan are architects for a wine cellar for Mr. A. D. McBride, to be 150 by 30 feet; two stories, built of stone; "rough cast" plaster on outside of first story, and to be fireproof. Iron construction inside. It will contain 150,000 gallons of wine and will cost when completed about $12,000. Roof will be of tile or tin. Also for a club house for the Delta Upsilon society, of Rochester; to be built on Strathallan Park; will be about 40 by 80 feet, and besides commodious and well arranged club accommodations, will contain several fine suites of rooms for bachelor apartments; to be built of stone, brick and shingles, and to cost about $12,000; to be heated by steam or hot water. Also frame residence for Mr. J. P. Smith, to be built on Hawthorne Terrace; a special feature to be made of some fine pieces of stained glass; cost when complete $7,500. Dwelling house for Mrs. Sarah J. Richards; to be built on Rutger street; to cost $7,000. It will contain several nice pieces of cabinet work. Frame house on Argyle street, for Mr. George C. Cochrane; to cost $6,000. Alterations and additions to the Rochester club house. Residence for Mr. George E. Hatch; to be of stone and shingles, heated by hot air furnace; cost $6,000. Frame residence for A. J. Smith; to cost $5,000. House for A. J. Hoyt; to cost $4,000. Club house at Geneva, N. Y., for the Sigma Phi society; nearly complete; cost $8,000. For the Rochester Power Company they are doing a seven-story building, 120 by 50 feet, of brick and stone and iron; to be used for manufacturing purposes, and will cost $38,000. Also for the same company another seven-story building 100 by 50 feet, of stone, brick and iron; to be furnished with steam heat and power, sprinkler system for fire protection, fire escapes, iron stairs, gravel roof; will have two elevators; will be used for manufacturing purposes and will contain a thorough system of plumbing, drainage and heating for workrooms and for dry kilns; will cost $42,000. Also for the same company, alterations that will cost $10,000, which consist of new plumbing, fire escapes, skylight, heating, sprinkler system, painting, etc.

Architect Wm. C. Walker has prepared plans for two houses, for Messrs. Elwanger & Barry; to be built on South avenue, of brick and frame, to have cabinet finish inside; cost $10,000. For Mr. A. Constas a business block on Lyle avenue; to be three stories high, built of stone and brick; tin roof, galvanized iron cornice; cost $6,500. For Mrs. Mary Taney, a five-story manufacturing building, to be built of brick and stone, tin roof, galvanized iron cornice; cost $6,500. Also for Mr. Edward McKnight, a frame residence; to cost about $4,500.

Architects Rogers, Sturges and Stern have prepared plans for a six-story block to be built on Hone street for Mr. G. L. Mackey; frontage of 104 feet and 110 feet deep, will be of brick and be used for manufacturing purposes; cost $50,000; will have steam heating and freight elevators. Also for a brick and frame residence on North Goodman street, for Mr. L. L. Hone; will have first-class plumbing, steam heating, hardwood finish; to cost $10,000. For a block of four residences for Joseph R. Otto; size 40 by 80 feet, two stories; cost $7,000. For an Assembly Hall for the Berith Koelesh Society, to be used in connection with the Jewish Synagogue; will be of brick and stone; cost $5,000. A frame barn for Gasson and Michalls; cost $3,000. Grand Stand for the Rochester Base Ball Association. A frame block of one store and three flats, for Mr. B. Levin; to cost $3,500.

**Sioux City, Iowa.**—Architect J. W. Martin is preparing plans for a $6,000 residence for L. E. Skinner, also same for R. M. Wilbur.

**Sioux Falls, Dak.**—Architect W. L. Dow: For W. C. Hollister, a bank and office building, brick, tin roof; cost $25,000.

**St. Louis, Mo.**—The Odd Fellows will erect a building at East St. Louis; to cost $50,000. Mr. T. Neukom will erect a two-story brick dwelling; cost $25,000, contractors Zwicki and Doerflinger.

**Tacoma, Wash.**—The Y. M. C. A. will erect a $100,000 Association building. Work to be commenced in the fall.

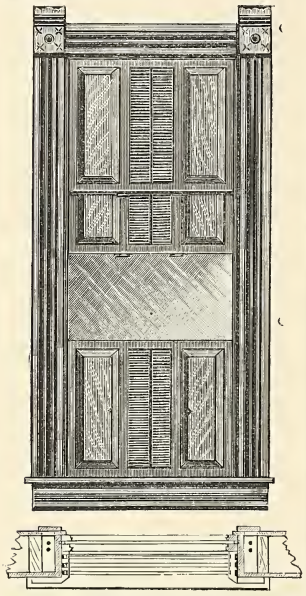
Architects Proctor & Dennis will receive proposals until the 28th of August for the erection of the stone and brick court house here.

Architects Holbertson & McIntosh have just completed plans for a $250,000 Chamber of Commerce building to be erected here.

**Trinidad, Col.**—A First National Bank Building will be erected; to cost $100,000. Also a new Union Depot Building; at a cost of $50,000.

## Poppert Sliding Blind.

Attention is called to the advertisement of the "Poppert Sliding Inside Blind," which makes its first appearance in THE INLAND ARCHITECT with this number. The inventor claims to have avoided defects that obtain with other similar blinds, and presents his as one simple in construction and at the same time neat and durable.



Instead of using springs for adjustment he uses counter-balancing weights, the same as ordinarily used for sash, and which allows each section to act independent of the other. The weight-cords run over glass journals which enable the cord to run without perceptible friction, so much so that a mere tip with the finger will set the section or sections moving. The weights are entirely inclosed between the blindway and the face of the frame, and the back of the blindway is grooved to allow for the travel of the weight. The manufacturer has an illustrated catalogue furnishing information and illustrations pertaining to a complete exposé of the merits of the blind, which may be had on application, and it should form a part of every progressive architect's literature. For his address see advertisement.

## An Important Legal Decision.

Judge Blodgett, of the United States District Court for northern Illinois, has just rendered a decision in a patent case which is of interest to the building fraternity. In April, 1887, Leon H. Prentice was granted letters patent for a design for loop radiators, providing for their ornamentation by embossed or depressed figures. This patent was assigned to the Eclipse Manufacturing Company of Chicago, which, as is known, put the same on the market. Adkins & Son, also of Chicago, something like two years ago put an ornamented radiator loop, known as the "Ideal," on the market, said loop being manufactured by the Pierce Steam Heating Company of Buffalo, New York, for them. The Eclipse Company entered suit against them for infringement of the Prentice patent, and this decision is in finality of the hearing, the case having been in the court nearly two years. The decision derives its principal interest from the fact that nearly all the ornamental loop radiators are affected by the decree. The decree finds the defendants are infringers and directs an accounting of profits and damages and "perpetually enjoins and restrains the defendants, * * each of them, their servants, agents, attorneys and workmen, each and every one of them, either directly or indirectly, from making, constructing, using or vending to others to be used, radiators containing or embodying the design described and claimed in said letters patent No. 17,270," granted to said Leon H. Prentice.

## Trade Notes.

C. H. MITCHELL & Co., builders of the well-known patent lift safety elevator for hydraulic, steam, gas or hand power, are now comfortably domiciled in their own five-story brick building Nos. 363–365 South Clinton street, Chicago. While the patronage of the company has always been a matter of eminent satisfaction, its upward tendency is evidenced by the orders of the past month, which have made its trade the largest in the history of the house. The trade extends all over the West, South and Northwest and has a respectable inclination eastward. The company has issued a fine illustrated catalogue, which may be had on application.

MR. ERSKINE W. FISHER, of No. 18 Broadway, New York, importer of the celebrated Stettin ("Anchor" brand) Portland Cement, sends us a circular calling attention to the effect the McKinley Customs Administrative Bill has upon the Portland cement trade, increasing the duty on that article by about 15 cents per barrel after August 1, next. It is the duty of everybody using or dealing in Portland cement to urge the passage of a fair tariff bill. Mr. Fisher will be pleased to explain anything that may not seem perfectly clear, and invites correspondence.

The McKinley Customs Administrative Bill went into effect on August 1, and by restoring the duties upon packages, transportation charges, etc., will increase the cost of *all* Portland cements by about 15 cents (fifteen cents) per barrel.

It is to be hoped that a *tariff* bill will be passed shortly, levying a specific duty about equivalent to that now being paid. In the meantime, all contracts, prices and quotations are made, *subject to any advance in duty, whether caused by direct or indirect legislation.*

ERSKINE W. FISHER,
Welles Building, 18 Broadway, New York.

FOR heating workshops and large factory buildings, or for kiln drying and kindred uses of heat, the Buffalo Forge Company, of Buffalo, New York, have solved the problem of economy and effectiveness by a "hot-blast apparatus" which the company has been introducing to the public for the past few years. It has been the privilege of THE INLAND ARCHITECT to read a number of letters from users of the apparatus — parties whose establishments are of a magnitude to put it to a crucial test — and without exception, the verdict is that it excels direct steam, stove or furnace heating in effectiveness, and in a marked degree lowering the cost of such caloric comfort.

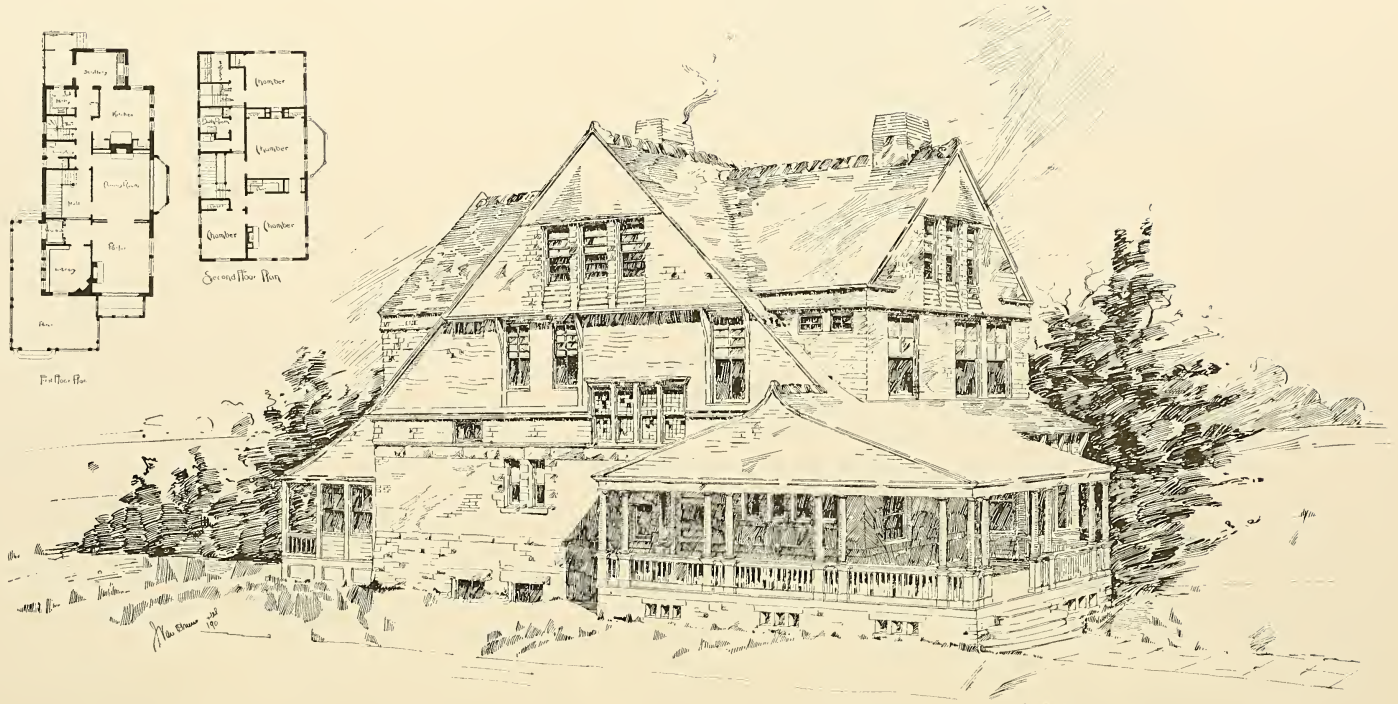
M. MAHONY, Troy, New York, manufacturer of the popular Mahony steam and hot water boilers, has issued a very neatly gotten up 76 page illustrated book affording full information in regard to the merits of this unique steam or hot water heating apparatus. Aside from its tables of its capacities and prices, there are nearly one hundred photogravure views of public buildings and dwellings scattered all over the country, in which these heaters are used with eminent satisfaction, judging from the testimonials accompanying them. It is to be borne in mind this boiler is extremely simple in design; consisting of a heavily corrugated cast-iron fire-pot of one piece and a cast-iron shell of one piece, the space between them forming the water and steam space. It is a direct draft boiler and made either as a surface or magazine self-feed burner. Having no joints to become leaky, nor complicated apparatus of any kind to bewilder the operator, always reliable and economical, it is not difficult to tell why the Mahony boiler has become one of the most prominent among the popular house-heaters of the day.

THE illustrated catalogue of "Perfection Padlocks" manufactured by the Ames Sword Company, of Chicopee, Massachusetts, has found its way to THE INLAND ARCHITECT table, and may be said to be *multum in parvo*. Certainly it makes a very interesting disclosure of what is being accomplished in the direction of staple locks. Think of it. A padlock not much larger than a kernel of corn, and yet a perfect, reliable lock, and so on, until you get up to a lock large and strong enough to fasten a prison door. And these made in solid brass, or bronze, or gold, or silver, or nickel plated. There are padlocks and padlocks, but it is evident perfection in them has been reached only by the Ames Sword Company.

THE Willer Manufacturing Company, of Milwaukee, has made THE INLAND ARCHITECT debtor for a copy of its architect's and builder's catalogue and pricelist. As a specimen of fine printing it is equal to the best that so far has come under observation. Its letterpress matter and engravings show an amount of intelligent and careful compilation worthy of universal emulation. No one can peruse its contents without feeling there is nothing more in the way of information to be desired. The book is a large quarto of 132 pages, bound in muslin and paper, illuminated on the title page by a chromo-lithograph on the cover of the late Emil Schandein's residence in that city. The first portion of the book is devoted to the "Willer Inside Sliding Blinds," and the remainder chiefly to "stair work" and hardwood interior finishing products. Of the former, it is only necessary to recapitulate in a general way what the architectural profession know in a more extended and detailed way of the peculiarities of this popular window blind. Instead of being hung in folds or on hinges it is made to slide up and down like a sash and in sections of two, three, four or six, as occasion may require, each section acting independently of the other and held in place, at any point of the window, by an adjustable spring. The rolling slats of the blind are operated by a peculiar device which obviates the use of the unsightly wooden rod common to the ordinary slat blinds, and permits the slats to be removed and replaced with ease for the purpose of cleansing. In fact the entire blind is so constructed and adjustable to place that its removal for cleaning, in whole or in part, is a matter so simple that this quality alone could well account for its great popularity, and why, in the last four years, the output of the company has increased nearly a thousand per cent. That portion of the book set apart for the illustration and enumeration of the various hardwood products of the company is not only replete with valuable information, but from examples given of stair and hall work offers hints to the artist which are not likely to go unheeded. Of course, so large and expensive a book cannot be distributed gratuitously and promiscuously, but we learn it will be mailed free to all architects and builders who are inclined to utilize the products of the company, by sending 50c for the paper covered edition or 75c for the stiff cloth bound edition.

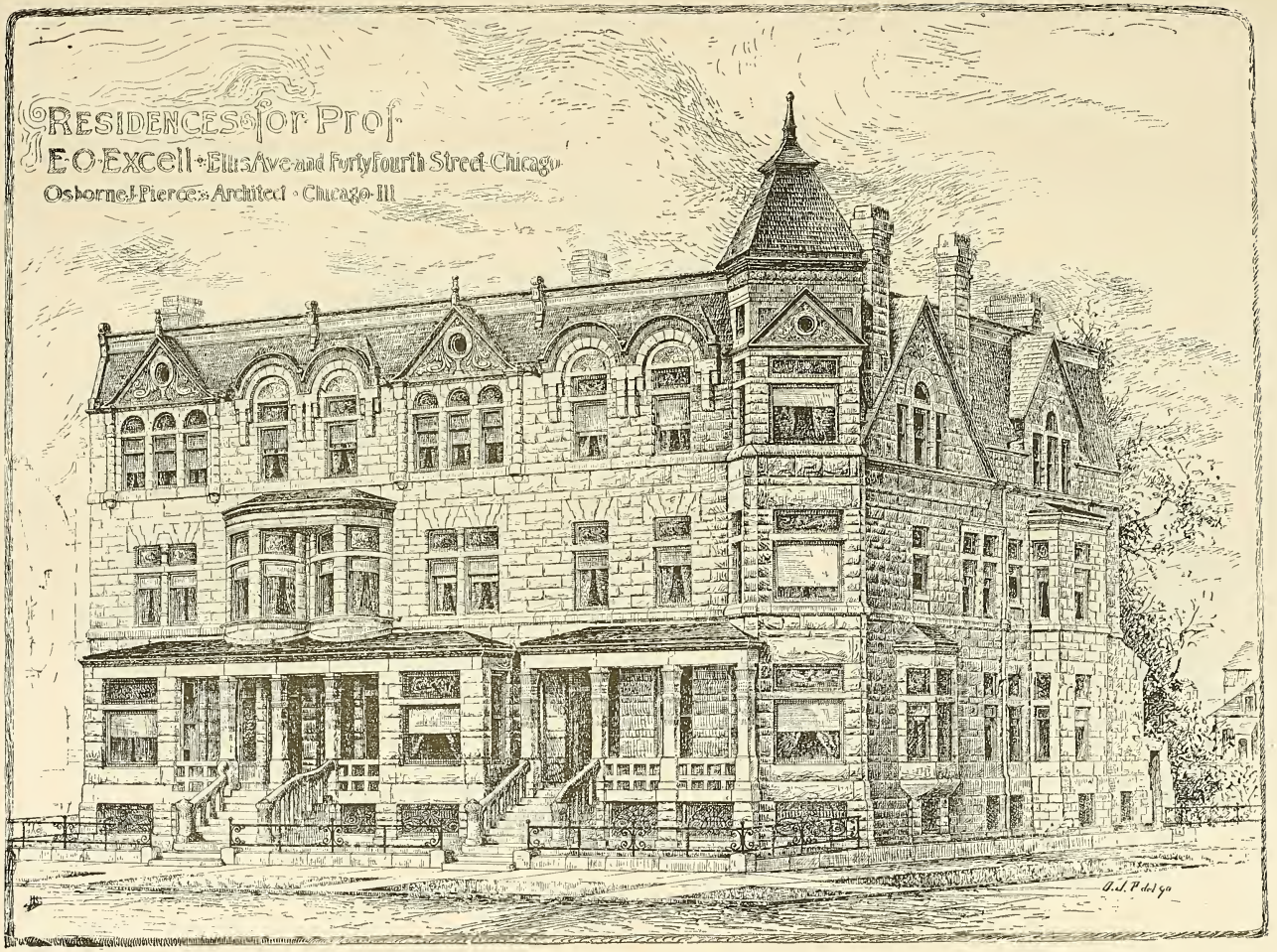
## Railroad Note.

TRAVELERS and tourists contemplating a visit to the Pacific coast should bear in mind the Lake Superior, St. Paul & Union Pacific, a new passenger and freight line formed by the Chicago, St. Paul, Minneapolis & Omaha and Union Pacific railways. This line strikes about all the important far western towns and cities, i. e. of Nebraska, Montana, Idaho, Utah, Wyoming, Washington, Oregon and California, and reaches the coast several hours sooner than any other route. The accommodations are first-class in every respect and the fare as low as the lowest. Special excursion trains are run, leaving St. Paul and Minneapolis every Thursday morning. For fuller particulars address T. W. Teasdale, general passenger agent, St. Paul.




RESIDENCE: for Mr. Geo A. Fowler. Kansas City Mo.
A Van Brunt Archt


At Chinon, France
John T. Jackson
1890

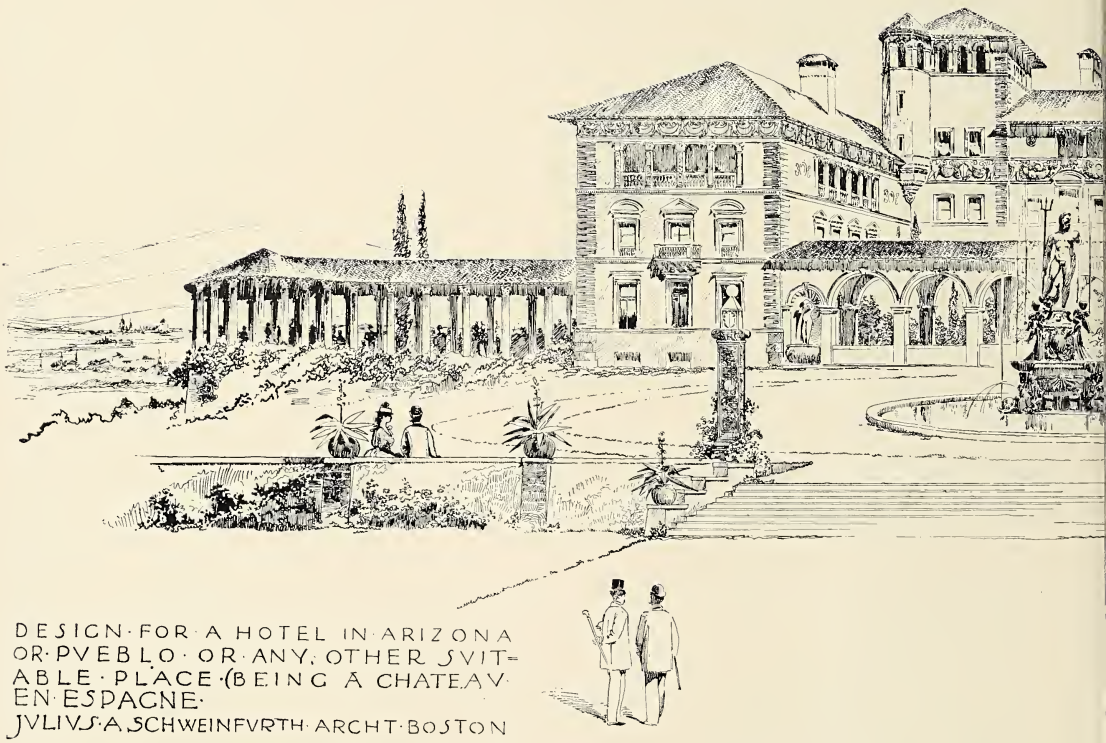

Residences for Prof.
E.O. Excell - Ellis Ave and Forty Fourth Street Chicago.
Osborne Pierce Architect - Chicago Ill.



WALKER AND BEST ARCHTS
BOSTON AND OMAHA

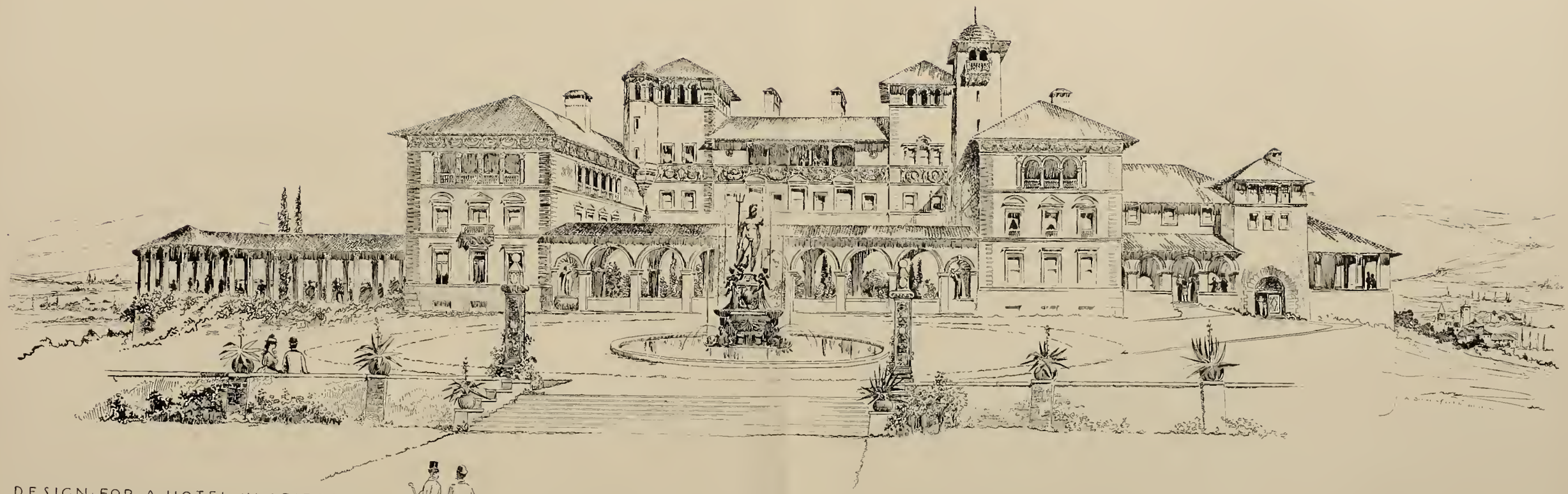
HOUSES ON LANDON COURT OMAHA NEBRASKA

FOR THOMAS SWOBE ESQ



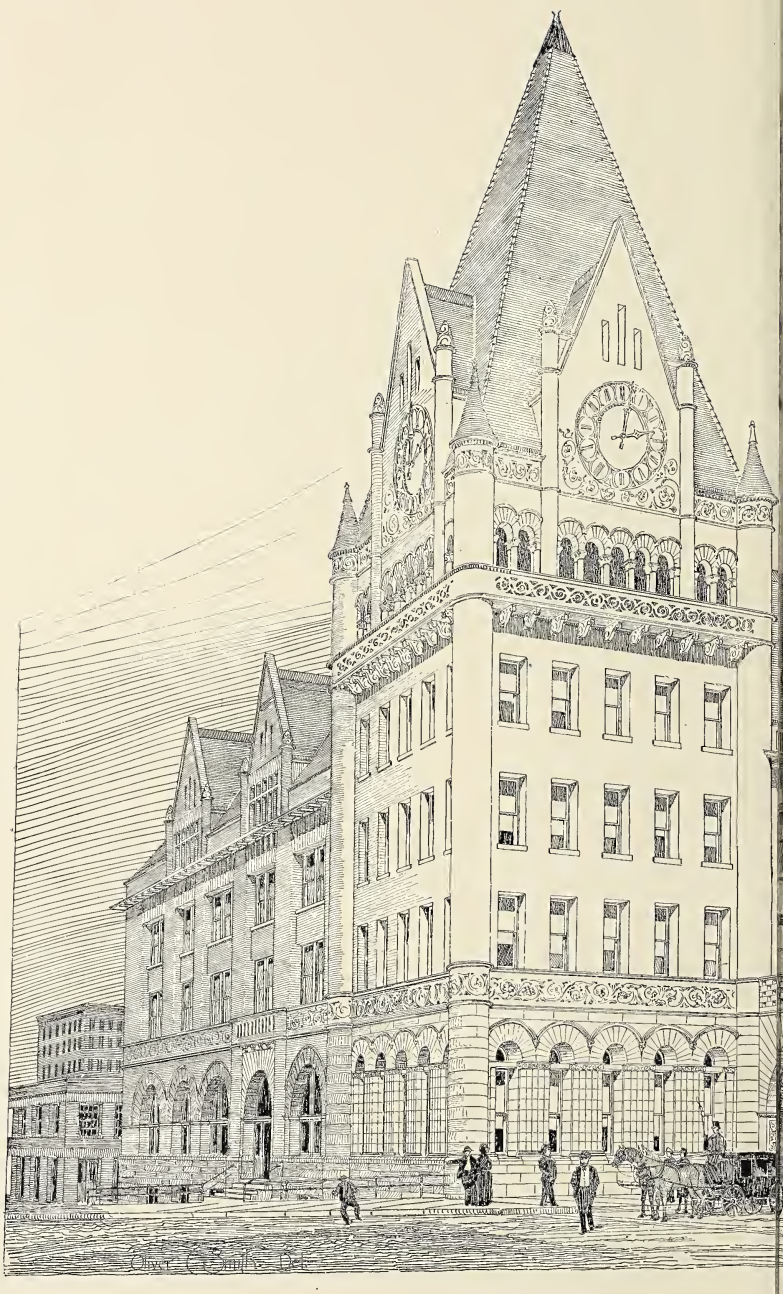
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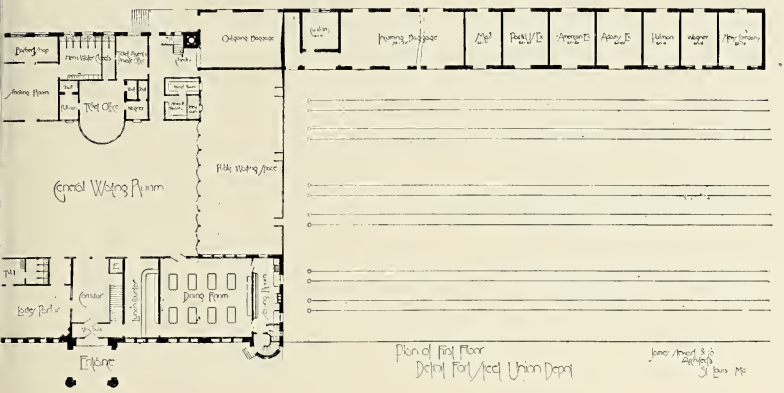
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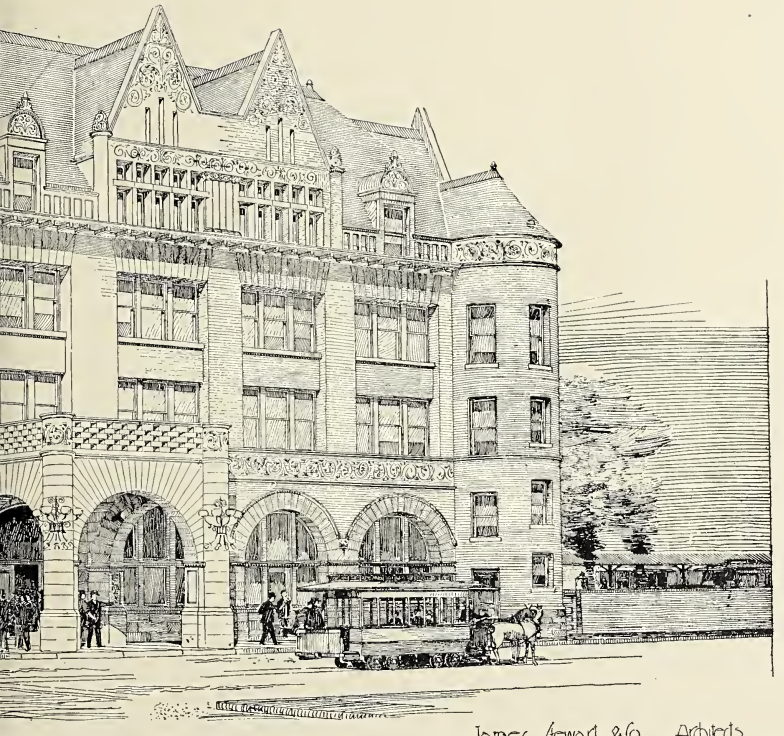




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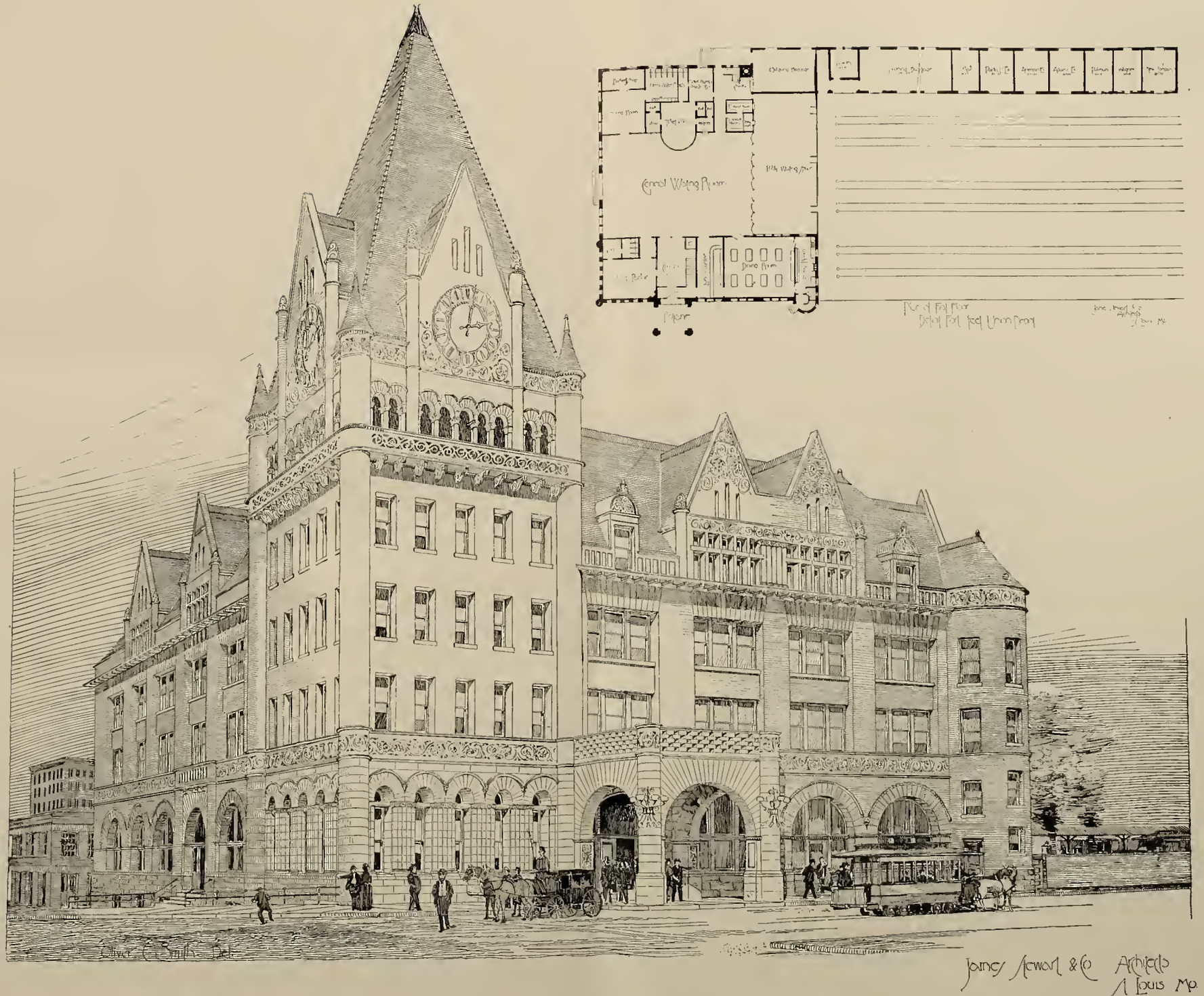


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SEPTEMBER, 1890.

# THE INLAND ARCHITECT

AND NEWS RECORD.

*A Monthly Journal (with an Intermediate News Number) Devoted to*

ARCHITECTURE,

CONSTRUCTION, DECORATION AND FURNISHING

IN THE WEST.

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Annual Convention of the American Institute.

The second convention of the consolidated American Institute of Architects will be held at Washington October 22, 23 and 24, 1890. This date was decided upon at the last meeting of the Executive Committee held at New York on August 18. In pursuance of the work done at this meeting the following general circular was issued by the secretary, and should not only be read by every member, but the matters referred to should receive due attention:

AMERICAN INSTITUTE OF ARCHITECTS.

OFFICE OF THE SECRETARY, CHICAGO, August 27, 1890.

DEAR SIR,—The next annual convention of the American Institute of Architects will be held in Washington, D. C., on Wednesday, October 22.

It is of the utmost importance that all Chapters of the Institute should be organized under the charter, constitution and by-laws of the Institute before the above date, and that the reports of such organization, together with a copy of the Chapter's constitution and by-laws, should be in the secretary's hands at least two weeks before the convention.

In the organization or reorganization of Chapters, attention is called to Article X of the By-laws of the Institute, and to Article I of the By-laws, relating to membership.

The reports of Chapters for the past year and all reports of standing committees should also be sent by the same time.

It is hoped that Fellows of the Institute will add to the interest of the convention by contributing essays upon architectural and collateral subjects, and that notice of such papers, together with all other matters of interest, will be forwarded to the secretary as above.

It is recommended that contributors of essays, etc., make six typewritten copies for press purposes.

The convention should be of such interest and importance in determining the influence and growth of the profession that a large attendance is anticipated.

JOHN W. ROOT, Secretary.

The importance of a thorough reorganization of all state and local Chapters need not be commented upon and the subsequent report upon the same sent to the secretary as directed. It is also incumbent upon members to see that those state Chapters that have failed to reorganize, or those that have fallen into inactivity (of which there are several) should be reported upon, giving their present status as nearly as can be ascertained. As it is proposed to make the coming year one of active reorganization, it is of great importance that the secretary be fully informed so that the work can be intelligently planned and carried out. The request that committee reports be placed in the hands of the secretary two weeks before the convention should be fully complied with, as it will greatly facilitate work when the convention meets. We would advise that all such reports be printed and mailed to members before the convention, so that they can be thoroughly understood and discussed. This is done by other large associations with good results. As intimated by the circular, the coming convention is one of vital importance to the profession, and every member should set aside those dates for that business only, and allow no engagement or client to appropriate them. If this is done, the Washington meeting will stand first in the history of association meetings in number of attendance and importance of work done.

Fifth Annual Convention of Ohio Architects.

The fifth annual convention of the Association of Ohio Architects at Toledo brought together the architects of the state and several visitors from the associations of Michigan and New York. The most important matter that came before the convention for action was the reorganization of the association into a Chapter of the American Institute. It was decided to do this, and the constitution and by-laws were revised to meet the new requirements. That the change might be brought before each member of the association before final action, it was

directed that the new constitution be sent to each member for acceptance or rejection. That the vote in favor of the reorganization should be unanimous, is beyond question, as so large a number of the members are already members of the American Institute and those who are not desire to be. The meeting of this association, coming as it does in midsummer, allows a programme that is largely in the line of entertainment, and this meeting was exceptional for this quality, the many ladies attending giving it the aspect of a summer outing rather than a meeting for the consideration of business affairs.

A World's Congress of Architects in 1893.

It has no doubt suggested itself to a large number of the profession the extreme desirability of a congress of the architects of the world at Chicago some time during the Columbian Exposition. And this is a matter that should be considered at the next convention of the American Institute and a strong committee appointed to organize and carry out the project. This also suggests a world's exposition of architectural drawings and models, which it seems to us should be in charge of the same committee. It is none too soon for active work in this direction to commence. All the noted architects of the world should be present, and the exhibition of drawings should show the best work of modern architects and to a greater, more comprehensive degree than the buildings erected for the exhibits of the several nations can. It would not be too much to ask that a special building be erected in the art department for the purpose of architectural display alone, or with such in the line of engineering as pertains to architectural construction. This building should be distinct in its location as well as purpose from any exhibit purely engineering in its character, as it should be separate from any exhibit of building materials and appliances. It might be well for the coming convention to consider the exhibition of materials, but this should be given to a separate committee and be kept distinct from the department of design. We have many things architectural in America that foreign architects will be glad to learn more about than they possibly can from books or the pages of architectural journals, and in the hands of an energetic committee this congress and exhibit can be made greater in attendance and greater in results than any similar architectural event the world has ever seen.

A Misstatement Regarding Architectural Practice.

A great deal of wisdom may be found in the expressions of newspapers, but seldom when a professional question is involved. A recent statement made by the Kansas City *Times* is trivial in itself, but so grossly misrepresents not only the architects of that city but the profession in general, that it is necessary to refute it here. In connection with a report of a directors' meeting of the new Masonic temple to be built there, is printed the following:

> Action was also taken yesterday upon the question of employing Kansas City architects. A motion to employ home talent was voted down. The reason given was that the Masons of the city are entitled to the very best, no matter whether outside or home talent is employed. The worst phase is that the architects always have a great deal to say concerning the material to be used and the workmen to be employed, and while Kansas City architects will naturally favor Kansas City materials and Kansas City builders, outside architects will undoubtedly favor outside contractors and outside builders.

In regard to the action of the directors we believe them to be right, except that home talent should be carefully canvassed and receive a preference, all things being equal. To us it seems that the architects of Kansas City are fully as able to design and plan a satisfactory structure as might be obtained by seeking outside talent. But the point we wish to notice is in the voluntary statement of the *Times* in regard to the members of the profession being inclined to use home labor and material. In this there is not one iota of truth. An architect is the agent of the owner. He is also an artist. In the former capacity he will seek to have the work performed by the lowest bidder, always, however, holding it true economy to let contracts to those whose business methods and integrity he knows, and this may give the work in a majority of cases to the home contractor, but not necessarily so. The foreign architect is just as likely to be compelled to engage the home contractor, because he can figure lower and handle the work with greater facility. In the latter capacity, that of artist, he designs his building and specifies such material as will carry out the harmony of his design. In these days of cheap freights there is no localizing of material. More St. Louis pressed brick is used in Chicago, three times, than in St. Louis. Brownstone from Connecticut is used in every state in the union, and where an inferior home material is used it is always through the parsimony of the owner as against the architect's wish and judgment. The knowledge of the American architect is in nowise local. He knows the artistic and commercial value of every material that enters into a building that is in the market, and he makes his choice with no local feeling other than the always present, but nevertheless aggravating one, that of cost. This will influence both the home and foreign architect to use the labor and material nearest at hand and act upon one just as much as the other. Of course the *Times* will not take the trouble to gain some knowledge of architectural practice, and may continue to make itself ridiculous by such wild misstatements as the above, but it has no right to recklessly libel a profession that is as general in its knowledge as that paper is local.

Appointment of Consulting World's Fair Architects.

It may now be stated with some degree of definiteness that the general plan and location of the World's Columbian Exposition has been settled. Considerable agitation regarding site has been indulged in by the newspapers, and the public has been given to understand that the last two months have represented nothing but delay. As we stated in the issue for August, this was not true in fact, and the subsequent action of the directors shows that our judgment or information on the subject was correct in every particular. In the line of appointments, in conformance with the report of the Committee on Buildings and Grounds, after that of Olmsted & Co. as consulting landscape architects, Abraham Gottlieb, of Chicago, was appointed consulting engineer, followed on September 4 by the appointment of Burnham & Root, of Chicago, as consulting architects. A brief biographical sketch of each of the appointees is given on another page. The duties of the architects and engineer, as outlined, will consist in the general planning of the grounds, and the general preparation of data relating thereto, the appointment of architects for specified work, etc. There seems to be manifest a disposition to select the best architects and leave to their judgment the general design without any special limitations, the consulting architects merely furnishing data regarding topography of ground, purpose of building and the amount of money to be expended. In the opinion of the consulting architects, the general direction in design should be as little historical and as greatly illustrative of

the present status of American architecture as possible. It might be said that three distinct styles have developed in the United States, with sufficient distinctness to be generalized under the headings of "Romanesque," "Frances I" and "Colonial." The architects may advise that the buildings be largely conferred to these adaptations of styles—the heavier or permanent buildings in the Romanesque, the lighter and more ornamental in Frances I, and others, where wood is largely used, in Colonial; the entire idea being to show that we have a beginning, at least, of an American style, and to show that style in its present highest development. The appointment of Architects Burnham & Root as consulting architects meets with general approbation with the profession, especially as it assures to the fair the work of a large number of the best architects in the country, making it an expression of a national architecture rather than the designing of one individual. It is exceedingly complimentary to the profession to note that the secretary of the American Institute is selected as one of the consulting architects, while the president of the Institute, R. M. Hunt, of New York, was also considered for the position.

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**The Lake Front site for the Columbian Exposition.**

By readopting the dual site accepted by the national commissioners for the World's Fair, on September 9, the directors set at rest most of the speculation regarding the matter that has been indulged in by those but little informed or willfully blind to the certain course to be pursued by those having the many interests pertaining to a successful carrying out of the enterprise in charge. The loss of confidence that may have been sustained by the apparent delay in settling the question of site has been more than offset by the work of preparation which has gone on steadily, but of which it was not deemed expedient to keep the public fully informed. Real difficulties have been met and overcome, but they are not those which the public has supposed to be the reason for apparent inactivity. While the lake front site was chosen because it was thought the fair could be most successful in that locality, it is hoped that the filling in of ground, construction of the necessary sea wall, docks, etc., will eventually solve the river bridge problem, and, closing the bridges, place the harbor upon the lake front. It is one of the most incomprehensible things to the visiting stranger how a city standing second in population in the United States and destined to be first in commercial importance, with facilities for establishing docks rivaling those of Liverpool and with a constantly growing necessity, can tolerate a river harbor that is more circumscribed in dock frontage than it was twenty-five years ago. Added to this, the constantly increasing size of the craft, let alone the increase in number, the removal of the city's commerce either to the lake front or its deflection to harbors twelve miles south seems to be an immediate and imperative necessity. The so-called lake front park is a city nuisance, a "loafer's paradise," and should be abolished or the ground filled in for two or three blocks beyond and given to commercial purposes. The time for sentiment in this matter is passed and Chicago must in this particular choose between the commercial convenience pertaining to a great metropolis or the sentiment of a village green in the center of its greatest activity. The consent of abutting property owners has yet to be obtained and also that of the Secretary of War, before the exact amount of lake frontage to be used can be decided upon, but this will not delay the active work of planning.

**Second Competition for the Robert Clark Medal.**

The second competition for the Clark medals, open to "any draftsman in the United States under thirty years of age who is not a practicing architect," introduces a subject which is as "different" from that of last year (a library building) as one can conceive. Perhaps this was one of the reasons that governed the honorable committee in its selection. The present competition will certainly call for draftsmanship as well as technical knowledge of a high order, especially in the line of classical form and detail. While it may prove a stumbling block to draftsmen who are otherwise proficient and will give a superb opportunity to those who have studied the classics, it will be valuable in that it will incite among all a more thorough study in this line. It is a fact, but much to be regretted, that the American architect and draftsman is inferior to his European contemporary in the line of monument designing, and any effort like the present toward increased proficiency is most laudable. The problem given and the conditions of the competition are as follows:

Chicago, August 20, 1890.

The committee in charge of the annual competition for the Clark medals submits to the draftsmen of the United States the following problem:

It is required to design for the equestrian statue of General Robert E. Lee, recently erected at Richmond, Virginia, a pedestal which shall be unlike the one upon which the statue is now set. The design shall comprise the pedestal and the approaches and surroundings of the monument, and no limitation as to the cost or material or dimensions of the pedestal and its accessories are imposed by the committee.

The site of the monument for the purposes of this competition shall be immediately outside of the entrance to a public park and at the end of a broad boulevard on each side of which are tall and elegant buildings, apartment houses, hotels, etc.

Drawings shall be rendered on two sheets, one containing such ground plans, elevations and sections as may be required to illustrate fully the intention of the designer, and the other a perspective drawn to any scale and rendered in any manner desired by the individual competitors. The size of the sheets shall be 16 by 23 inches and they are not to be rolled for purposes of shipment.

Drawings will be received until and not later than noon of the *first* day of *November*, at the office of the chairman of the committee, room 1600, Auditorium Tower, Chicago.

An excellent illustration of the statue for which the pedestal is to be designed can be found in the supplement to *Harper's Weekly* of March 29 1890.

D. Adler, Chairman,
Henry Ives Cobb,
N. Clifford Ricker,
Lorado Taft,
Samuel A. Treat.
} Committee.

It is also stated by the committee that enough funds are at its disposal to permit the awarding of several bronze medals in addition to the gold and silver medals already provided for. This should incite a general effort by all draftsmen to win some meritorious recognition in the Clark competition, and each should go about the work with a determination to stand high in the ranks of those to whom awards are made. The time till November 1 is short, and the work to be successful must receive the closest study both in rendering and in technique, the alphabetical knowledge of the designer being a point upon which the closest criticism will doubtless be directed. We hope that the munificence of Mr. Clark will receive at least the evidence of appreciation among the draftsmen by the large number of contestants. While the competition was directly presented to the Chicago Architectural Sketch Club, it was generously thrown open by it to the fraternity throughout the United States, and they too should be indorsed for their generous action in the same manner, and this competition and that of the New York Architectural League, the two great competitions of the year open to American draftsmen, should be strongly contested. We publish in photogravure the face and reverse of the Clark medal, from the casts designed and executed by J. Gelert, sculptor, of Chicago, and through the courtesy of Harper Bros. we reproduce in this number the Robert Lee statue referred to in the competitive circular.

## Views of an English Architect on Theater Construction.

BY ERNEST A. E. WOODROW, A. R. I. B. A.

PART III.

THE several divisions of the auditorium should each have their separate entrances, exits, passages, corridors, staircases, saloons, lavatories, etc. Each section of the audience should have two exits, used also as entrances, in corresponding and relative positions on the plan, on either side of the house, placed so as each to take half of the people accommodated in such section. All exits and their approaches should lead directly into the street, and should be used only by that division of the audience for which they are designated. There should be no pass doors or emergency exits leading from one part of the house to another. A door known as an emergency door is only a trap, for when opened it too frequently leads into a passage, or staircase, already crowded to its utmost. It is not necessary in this paper to enter into a description of what are the best lines and forms on which to base the design for the auditorium, in fact, after all, it is a matter of taste, and if there is not a seat from which a good view of the stage cannot be obtained, or from which anyone endowed with an average faculty of hearing cannot understand the lines when distinctly spoken by the performers, there will not be much to complain of in the plan of the auditorium. Of course, one must never lose sight of the safety of the public, and perhaps to obtain this it is as well that everybody should be seated as near the street level as possible. Sometimes the varying levels of a site will greatly aid this; for instance, at one house in London a few steps lead you to the gallery. You enter the upper circle on a level of one street, the dress circle on the level of another, the pit and stalls are but a few steps down.

Where the site is level throughout, this arrangement is not so easy to obtain, yet the same principle could be carried out by excavating for the pit, and putting the circle at the street level, and adopting this method the various sections of the audience would have a better chance of gaining the street quickly in case of emergency. As the building, in consequence of this arrangement, would not have to be carried so high as it would be if the pit were on a level with the ground, it would give a better chance of outside aid in cases of fire. Some would perhaps think that the pit occupants would be badly off if below the street level, but, on the contrary, they would be safer, for people going up stairs do not stumble and fall over each other to the same extent, causing a block and crush, as crowds going down stairs do. The number of tiers depends upon the class of business for which the house is built. An opera house must of necessity differ from a theater for the drama, and a music hall from a theater for grand spectacle. It is a good thing, however, to reduce the number of tiers where the business will allow. A high building is a mistake for seeing or hearing as well as for safety. The arrangement of seats should be such as to allow a 3-foot 6-inch gangway at either end of every ten to twelve seats. This would avoid that disagreeable pushing by of the late comer who has a seat in the center of a row and who enters with no feeling of regret for the disturbance and discomfort he produces. The widths of the seats depend upon the parts of the house in which they are placed, but by the by-laws of the late Metropolitan Board of Works each person should be allowed 1 foot 6 inches by 2 feet 3 inches. This would, however, scarcely do for the occupant of a half-guinea stall, although the 6d. gallery might be contented with it. Every seat should be divided and numbered and the house licensed to contain that number only. Seats should be made to tip up automatically on the occupant rising, so as to widen the distance between the rows for the convenience of people getting in and out. All seats should be securely screwed to the floor and be constructed of iron frames to reduce the inflammable contents of the house. There need not be anything combustible in the auditorium beyond the seat stuffing, the curtains to the boxes, and the carpets, and even these might be done away with and wood block or parquet floors substituted.

*Staircases.*— Staircases and passage-ways should be from 4 feet 6 inches to 5 feet wide, such width being only sufficient for five hundred people. Where the division of the audience is in excess of this, additional staircases and passage-ways should be provided, rather than the width of the original staircase increased. By this means every five hundred people would have a separate and distinct way to the street. Staircases should consist of flights of not more than eight or ten steps, intersected by wide landings to break the possibility of stumbling and falling over one another that long flights entail. There should of course be no winders or steps at half landings. The steps and landings should have bearings on solid brick walls at both ends, not be merely tailed into wall at one end only; brick arches should be turned at intervals to support long passage-ways or landings; these arches are better than iron joists, as brickwork will stand changes of temperature where iron will not. A square staircase is perhaps the best form, having six to eight steps to every one of the four flights, with a square landing at the bottom of every flight; the inner, or newel wall should be built of solid brickwork with the steps and landings securely tied into it. This wall should be carried to the same height as the outer wall and the whole staircase roofed in with a solid fire-resisting ceiling.

Strong handrails on brackets built into the walls should be fixed to both sides of all flights of steps and landings, leaving a space of three inches clear between the wall and the handrail, to allow room for a firm grip. So as not to lessen the width of the staircase by the projection of the handrail, a chase could be cut in the wall parallel with the handrail, thus allowing room for hand between the rail and the wall. This, however, tends to weaken the wall.

Slopes should always be adopted where only a slight difference in the levels exist; never should single steps or flights of three or four steps be allowed.

The corridors behind each tier of seating should be of such superficial area that the whole of the occupants of each tier could be easily accommodated therein without crushing. The corridors should be divided, on the party wall system, from the auditorium by brick walls and self-closing fire resisting doors, so that immediately the audience left their seats and reached the corridor, they would be in perfect security from any fire or smoke that might be filling the auditorium.

*Doors and Barriers* —All doors and barriers must be hung so as to open outwards, and close against the walls, the larger doors being hung in two folds. Fire resisting doors in the "party walls" should be hung to close automatically, in duplicate, one on each side of the wall, and fixed into iron frames built into the walls. The material of which to construct fire resisting doors is difficult to decide upon; if of iron, to be of any real service to retard the progress of the fire, the metal would have to be used in such thickness that the weight of the door would be very great. Thinner metal doors are serviceable to keep back the flames for a time, but are useless to stop the fire. Concrete doors in iron frames on wire netting have been tried, but they are heavy and liable to fracture. After all there is nothing like a good, solid thick oak door, and these, at any rate, could be used in the minor divisions of the auditorium. Thick wooden doors lined with iron would be better than thin iron doors.

A fire resisting door, as nearly perfect as possible, could be made upon the same model as safe doors, having an inner case of iron packed with sawdust and alum, surrounded by a strong, well bound and well hung outer case; these would be heavy and expensive, and as all fire resisting doors should be self-closing, in some degree dangerous, but they should be used to divide the larger risks of the house, such as workshops from stage, stage from auditorium, where the doors are not in frequent use.

The question of what fastenings should be used seems a small one, till one remembers the terrible disaster which occurred some years back in Sunderland, only because the wrong kind of bolt was used on a door; in this case, if my memory serves correctly, I believe a common barrel bolt caught in a hole in the floor, and the door remained only partly opened while hundreds of poor children were crushing one another to death in their struggle to get out. One cannot lay too much stress on the fact that it is from these insignificant and minor details, which are not thought of sufficient consequence to receive the attention that experience afterwards teaches they require, that the death list is swelled. Bolts, when used, should be of such nature that if lifted, a strong spring will hold them up and prevent them falling and catching in the floor. They should be of such length that they can be drawn from the floor by anyone without stooping, and those to the top of doors should have "monkey tails" long enough for any man or woman, of average height, to reach. Espangolette bolts are good, as by one action the top and bottom bolts are drawn. Locks are bad, padlocks worse, for keys are seldom to be found when required in a hurry: for instance, in the recent disaster at Forest Gate we hear of a key that was not forthcoming when wanted. A door barred and padlocked is hard to burst open, and never should such fastening be allowed in a public building. What is required is a fastening which will enable those who are inside to let themselves out at will and with ease, while it acts as an effectual barrier to those outside.

It is well to fix all inside doors so that they will close of themselves, and no better arrangement could be devised for this purpose

than the Norton door check; it closes the door gradually and there is no noise or banging to annoy when a performance is going on. Doors that are wanted to remain open should be fastened back by cabin hooks or springs; if a door becomes closed the public never think of helping themselves by opening it. How often has one noticed a crowd leaving a building, where only one wing of a double door has been opened; hundreds will fight, push and scramble to get through this half door before one man thinks it worth while to benefit those behind him by opening the other half of the door. It is purely selfishness on the part of a crowd; as soon as one has reached the door and has a chance of getting through, the feeling which has prevailed while struggling yourself toward the door, that all in front of you are idiots not to open the remaining half of the door, vanishes, and you are perfectly content when you gain the street to regard with equanimity the distress of those behind you.

The booking of all parts of the house would do away with the barriers at the pay boxes. Where these are used, they should be hung to open outwards, and not made so as to depend upon the memory and intelligence of some attendant to remove or unship them. Cases of panic occur as often before the commencement of a show as during the performance, as was the case but a few weeks since in America. At that very moment when the exits are blocked by the barriers which have been erected to stay the tide of the incoming crowd, there was a fatal crush between those entering and those struggling to get out. The consequence was of course a block, and death from suffocation. Mad people literally kill each other, stopped by such a small object as a barrier, which nobody has presence of mind enough to remove. These barriers, and the accompanying temporary or movable pay box, still to be seen at the top of staircases, and blocking up passageways which are already insufficient for the work they have to do, are a curse.

*Pay Boxes and Offices.*—The pay boxes and box office should be made a permanent part of the building, so arranged to be in proximity to the treasurer's office and under his supervision. Pay boxes may be so placed that they may serve for more than one division of the house. This can be done by having pay windows from the same box in two different passages, thereby saving the expense of one money-taker nightly, and helping to provide a house cheap to work. Some theaters are much more profitable to work than others, on account of such details as these having been observed, whereby the working staff can be made a small one. The treasurer's office should be planned with regard to the fact that therefrom the whole of the staff actors and actresses are paid weekly, and assemble there in large numbers. There should, therefore, be a waiting room, pay office and private room, with the safes built into the walls. The offices for the acting manager and his staff of clerks should be on a similar scale in the same suite.

*Saloons.*—While arranging the auditorium one must not forget to provide the British public "the bar," in which to smoke and drink. Saloons, where the auditorium is not fitted for smoking, should be provided with balconies for use in summer. Each division of the house should have its separate bar, to avoid that mixing up and use of pass doors which is so objectionable in regulating a theater or hall. Lavatories, cloak rooms, ladies rooms, etc., for each division must not be omitted.

*Outside Balconies.*—Outside balconies should be provided to each tier, as well as to each floor of dressing rooms and offices, access to which could be attained through the numerous windows already advised. From each balcony an escape staircase should lead to the street. Had this been compulsory, how many, many lives would have been saved in all the fires and panics for years past. The Savoy hotel is a good example of how well this system can be carried out. What a pleasant addition too in summer months this would be to a house, more especially where the entertainment is such as not to keep the attention of the visitor constantly on the stage. The cost of such balconies would be repaid to any enterprising manager in one season, for it would draw people to his house in the dog days, when all other places of entertainment were empty.

*Ventilation.*—I have already drawn attention to the importance of ample ventilation and light, for many bodies which are incombustible under normal conditions become inflammable at a high temperature. Every means should therefore be taken to keep places of public resort at an even temperature, thus adding to the health, comfort and safety of all. The stage must be well ventilated, and at the same time there must be no draught to cause the scenery to flop about. Shafts immediately over the "gridiron," with gas jets burning in them to cause an up-draught, on the same principle as the sun-burner in the auditorium, would carry off all that foul, heated air which hangs about a theater for hours and hours after the performance is over. The up-draught caused by the shafts would serve another valuable purpose. Should a fire break out on the stage the smoke would immediately find an escape instead of rushing, as it would otherwise do, into the auditorium and up toward the sun-burner. The gas jets in the shafts could be regulated by the gas man at his indicator plate on the stage, when the up-draught should be cut off. Fresh air should be admitted to the auditorium as near the floor level as possible; in winter it should be previously warmed, and the number of inlets should be regulated by the number of people that the house will seat. Gas burners in corridors or passages are bad, and should be replaced by electric light; however, where they do exist, they should have over them a funnel-shaped flue, by which the products of combustion could escape.

Perfect ventilation is imperceptible. To acquire such ventilation is a hard task. Draughts of cold air must not be felt; overheated buildings must not exist; foul, poisonous and heated air must be extracted, and warm and fresh air admitted. The number of deaths through breathing bad air in crowded buildings is far in excess of those caused by fire in such buildings. How frequently do we hear of colds caught through going to this play, or that concert, to say nothing of the minor inconveniences of headache and lassitude next day. With regard to ventilation, buildings of this sort have been left too long to take care of themselves. It is true our new theaters and halls show great advance in the right direction, but old houses are left untouched, are still poisonous pits, and little better than slow death-traps. Whatever method the various experts may apply, whether the vacuum or natural system, or the plenum or mechanical, is of little moment, as long as fresh air is supplied throughout the whole building—workshops, dressing rooms, stage, etc., as well as the auditorium.

Large sums of money have been expended in providing against contingencies which may arise, while the fact that thousands upon thousands are nightly sowing the seed of disease and untimely death by breathing poisonous air is totally ignored, and neglect is shown in many sanitary matters in public buildings.

The necessity of ventilation as a preventive of fire showed itself in a theater in England some years back. A pile of new bills, wet from the printers, was placed in a room devoid of ventilation. The oil of the damp paper commenced to heat like a haystack, until at last fire broke out. In the same way spontaneous combustion has been caused by heaps of old oil rags, and oil or water carelessly thrown on sawdust.

*Exhibitions.*—A new style of buildings for public amusement has of late years sprung up, in the form of temporary buildings used for exhibition purposes. As these exhibitions, in the majority of cases, are surrounded with attractive amusements of all kinds, they may well be classed under the heading of places of public entertainment. The extent of the ground that it has been necessary to cover has so far prevented the originators of the various exhibitions held of late in London and provinces from erecting any other than what are known according to the Building Act as temporary buildings, which have taken the forms of mere sheds. There is nothing to be said against these temporary buildings beyond their ugliness, provided they are constructed of iron and glass; but it seems a pity that the example in the magnificence and skill displayed in the buildings at the Paris Exhibition cannot in a small degree be copied in England. As long as ample gangway space is allowed for the circulation of the visitors, little danger need be feared. Between fifty and sixty per cent of the floor space should be devoted to gangways; and numerous exits should be provided in every court.

The greatest danger lies in the want of care of the exhibitors and their attendants. Fires are of frequent occurrence in stalls through the carelessness of these attendants. Therefore all that is detailed with regard to fire protections in theaters, etc., applies with equal force to exhibition buildings.

In buildings and places where the public assemble to witness performances or hear lectures the temporary character of the structure should no longer be permitted. Substantial structures should be erected similar to those for any other public building, and stalls or shops should not be allowed to be placed in or about these buildings used for entertainments.

So far it has been our object to try and point out in how many ways the architect can help the manager to obtain a house that can be worked with ease, comfort, safety and economy. One has now but to add a few notes that concern the architect alone, before entering upon the subject of fire appliances and protection.

(*To be continued.*)

## Cheap Homes.

UNDER the above heading, by "Luke Sharp," arch-i-tec, illustrated by the author and copyrighted, that most versatile writer in the columns of the Detriot *Free Press* presents the following article, that so clearly places before the public the true value of the ready-made plans published in newspapers and alleged building journals, and of the newspaper architect in general, that architects will appreciate his article, the truth of which is so well known but which is told as it was never told before. Mr. "Sharp" has probably built once, but it is hoped not from plans furnished as he describes, by a newspaper architect.

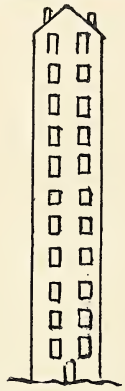


Fig I ELEVATION

It must certainly have been a friend of his who gave him his experience and incited him to the following graphic description and called upon his architectural ability to illustrate it with plans and elevations:

"One great boon which the American daily newspaper has conferred on its readers is the publication, now and then, of plans for house building, with accurate estimates of the cost of everything, from the front veranda to the step at the back door. These valuable articles are generally illustrated with elevations, so that you will know just how the house will look when it is finished, and also with ground floor plans and upstairs plans and attic plans, with every room marked off in feet and inches as nice as you please. Then the cost of materials is given and the cost of work, and the whole thing sums up to a total so ridiculously small when compared with the comfortable mansion we have erected that it is a wonder any of us pay rent to a hard-hearted landlord. In no other spot on this green earth is a comfortable home erected as cheaply as in the columns of a daily newspaper.

"Now it happens, luckily for the public, that I am something of a housebuilder myself. I have built several houses from plans of my own and sold them again as soon as I found, for various reasons not necessary to mention here, that I could not live in them. So I am enabled to give some valuable hints on housebuilding that are altogether too good to be lost. I don't wish to pose as being too generous in giving my plans away to the public, because I have really no further use for them. The next time I build I shall go to some architect in whom I have confidence and get him to draw the plans and see to the work, so my own plans are 'of no further use to the owner,' as the advertisements say.

"The great expense of a house is the roof, so if we wish to economize we must hit at the things that are most costly. Fig. I shows a house of ten rooms and an attic quite sufficient for the needs of a family containing husband and wife, with one mother-in-law, one maiden aunt, six children, a dog and three cats. Besides this there is ample scope for exercising the rites of hospitality. There is one spareroom for a friend on the tenth story (providing he can get into it), and accommodation for two tramps if they will consent to occupy one room. The house is square and thus shows a good example to the neighbors. Deal squarely with the world and the world will be square with you. I believe a home should thus reflect, as it were, the personality of the owner which mere architect-built houses never do. The rooms are all 14 by 14 (see Fig. II) and are amply lighted. As they are all the same size there is less trouble with the carpets. Architects who carp at newspaper articles on architecture will, no doubt, be quick to find fault with my plan because there is no provision made for stairways. They will claim, and doubtless they will get many prejudiced people to believe them, that if there is one thing more than another that a ten-story house wants, it is a stairway. I will confess that this point has given me a good deal of trouble, but I am pleased to be able to state that I have overcome every difficulty. A stairway four feet wide and fourteen feet high takes up a good deal of room and the carpets are hard to lay. Besides this the cost of such a stairway is $25.36 in New York and $24.50 in Omaha. Now a ladder fourteen feet long and three feet wide costs but $3.75 all over the United States. There is in my plan on each floor a hole three feet six inches square, and it must be remembered that a hole this size cost 47 cents less than a floor of like space. Therefore on ten floors we save $4.70 which enables us to buy the ladder and have 95 cents left. That is to say, the communication between these rooms costs us 95 cents less than nothing, and if this is not economy I would like to know what is. But this is not the only saving. As there would otherwise, according to a hide-bound architect's figuring, be ten stairways at a cost of $25.36 each, or $253.60 altogether, we have saved that amount as well, which added to the 95 cents gives us $254.50 to build the rest of the house with. But the advantage does not end here. The great bane of modern housekeeping is that we have too much company. Hospitality is very expensive and we generally get little thanks for it. Now, you take a pampered modern man, used to elevators and things of effete luxury, and place in his hand that fourteen-foot ladder. He mounts to the first story, hauls the ladder after him, and mounts to the second, and so makes his way to the tenth story. It is safe to say that if that man ever gets down again he will think twice before he spends another night with you. Yet you have exercised the rites of hospitality (and exercised the man as well) and there you are. Think of the saving in a year.

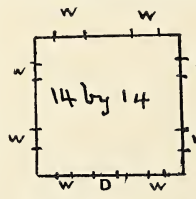



Fig II ground plan

"I believe I have established the superiority of the ladder system over the old-fashioned stairs plan to the satisfaction of any reasonable man. Of course, I don't expect to convince architects, for though they may endeavor to keep the fact a secret, yet it has been charged that they get a certain percentage on the amount expended and so, naturally, they prefer a $25 stair to a $3 ladder.

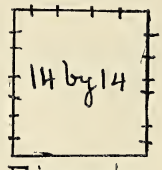



Fig III to X

"There is another matter, which belongs to housefurnishing rather than architecture, still it may be well to mention it here. It is a good plan to suspend a strong rug of old-gold color (or one with bright red and blue stripes is very pretty) under the trap door on the lower floor. This rug acts as does the air cushion under our elevator. As the nursery is in the seventh floor, children are apt to drop in on you now and then through the trap door. The rug catches them nicely and if the strings are strong will shoot them back three or four stories.

"The cost of a house such as Fig. I, calculated at Oshkosh prices, is, in wood, $230.60; in brick, at St. Louis prices, the cost would be a trifle higher, say $235 so as to include everything, as it is better to allow a good margin to prevent disappointment. In fact newspaper architects like myself are apt to put prices a little too high, but that is better than underestimation. In stone, at Rocky Mountain figures, the cost would be $240, and in marble, at Italian prices, $6 more.

"Some people who do not care what they spend on a home as long as it is comfortable may like Fig. XI better than Fig. I. Fig. I is better for a city lot — say 14 by 25 feet. Fig. XI is more adapted for a man who has a ranch forty or fifty miles square. It is suitable for those who like rooms all on one floor and who object to climbing ladders. It contains forty-nine rooms and is large enough for a man and wife, six mothers-in-law and from twenty-five children upward.



Fig XI ELEVATION

This style of building is well adapted for a rising Mormon settlement. If a cyclone should take it away the foundation (Fig. XII) would make a splendid checker-board, but the chances are that no self-respecting cyclone that had anything else to do would touch this house (Fig. XI). The plans here given are for a plain house, but of course any ornamentation that suits the builder can be added at extra expense. Calculations are here made for only what is necessary — pine all finished in the natural wood, for it is well to have something about the house that is natural. If my advice were asked in regard to ornamentation, I would strongly advise the putting of a mortgage on it. The cost is small, say about $10 and the lawyer's fees, and if you succeed in getting a good mortgage on it let the man who puts it on have the house, by all means. If the people refuse to put a mortgage on it, then a few fire insurance policies would be in keeping with the style of architecture. Everybody knows what is best to do with such a house before the policies run out. I have put no doors in many of the rooms, because the chances are you will have more room than you want anyhow, and so we save $2.50 on every door.

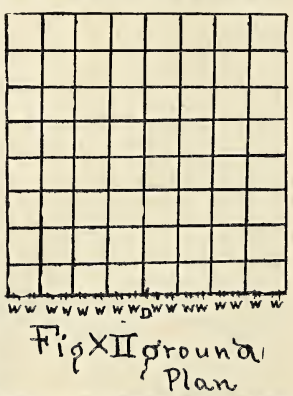



Fig XII ground Plan

"The cost of this house, everything complete, is $57.40. In order to get it built for that sum it is best to have agreement and specifications fully drawn out and then meet a builder some dark night, having provided yourself with witnesses, a stylographic pen and a loaded shot-gun. Get the drop on him and make him sign right there. This is a good plan to adopt if you want a house built for the prices usually mentioned in a newspaper article on home building."

This article attacks with that most effective weapon, ridicule, one of the worst deceptions a confiding public is imposed upon by, and if the newspapers of the country would accept the implied advice, they would remove the temptation to get something for nothing, that in the case of building leads to nothing but disappointment and pecuniary loss.

## A Columbus Low Relief Portrait from Cast.

AN autotype reproduction low relief portrait of Christoforo Colombo, from the original in bronze by H. H. Zearing, sculptor, Chicago, has just been completed.

The autotype reproduction is on fine Japanese paper, 23 by 27 inches. The portrait is over two-thirds life size. The bronze casts are 14 by 17 inches, and show all the detail and texture of the clay model. They are cast in standard bronze. There is also a composition cast.

In noticing this superb work of art, it may be well to publish the following opinions given by art connoisseurs, their highest praise of which we indorse:

*H. H. Zearing.* CHICAGO, March 19, 1890.

DEAR SIR,—Your image of Columbus seems full of merit. The face has a soul in it. A cheap copy of it for the people would help awaken historic study at the present time. Yours, DAVID SWING.

*Mr. H. H. Zearing:* CHICAGO, March 13, 1890.

Your representation of the great Chistoforo Colombo suggests to my mind all the dignity and nobility, courageousness and strength which all story writers agree in conferring upon him, and as I know that you have made use of the most authentic portraits in the execution of yours, and thus it renders a picture as true as possible—indeed I am much pleased with it. The execution is thoroughly artistic in the bronze as well as in the autotypes. Though a modern work of art, there seems to be an old fashioned air over all, as if it had been made by a contemporary of the great discoverer. J. GELERT, Sculptor.

*H. H. Zearing:* CHICAGO, March 7, 1890.

The autotype reproduction of your bronze bas-relief of Christopher Columbus has given me great pleasure. With well poised head and flowing hair, with an abiding faith in the calm, stern features, one sees him pacing the quarter deck of his modest ship. JOHN H. VANDERPOEL,
Teacher in Drawing and Painting, Art Institute.

CHICAGO, March 12, 1890.

DEAR MR. ZEARING,—I was very much delighted with the autotype reproductions of your bronze low relief of Christopher Columbus. The combination of great will-power with unusual activity of thought is well rendered in the expression of the face; and the exquisite modeling, combined with the plastic feeling of the flesh texture, leaves nothing to be desired. Yours truly,
HENRY F. SPREAD.

CHICAGO, March 26, 1890.

MY DEAR MR. ZEARING,—I am very glad to see and to possess the beautiful autotype reproduction of your bas-relief of Columbus. The work is timely and interesting. Artistically, it appears to me very successful in such matters as the texture and the light and shade. In your works I know we may always look for the conscientious and studious working out of an ideal, and if it were not for the appearance of detracting from former excellent works, I should perhaps say it was the best thing you have done. I hope it will commend itself to the public, and be successful in every way. Yours most truly, W. M. R. FRENCH,
Director Art Institute.

That this is a consensus of the opinion of the best art critics and artists, the reputation of each of whom is national, places Mr. Zearing's work in the front rank of bas relief sculpture.

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## Columbian Exposition Architects and Engineers.

THE Advisory Board of the World's Columbian Exposition of 1893, appointed under the recommendation of the Committee on Buildings and Grounds, consists of Architects Daniel Hudson Burnham and John Wellborn Root, Landscape Architects Olmsted & Co. (Frederick Law Olmsted, Henry Sargent Codman and J. C. Olmsted) Engineer Abraham Gottlieb, and a sanitary board of three.

Daniel Hudson Burnham was born in Henderson, Jefferson county, New York. In 1855 his father moved with his family to Chicago and went into the wholesale drug business. Mr. Burnham's early years were spent at the private school of H. O. Snow, who, with his wife and brother, taught most of the children of well-to-do families at that time in Chicago. After leaving Snow's school Mr. Burnham attended Jones' and public high schools, from which he went to Waltham, Massachusetts, and took a course of classics and mathematics under Edwin Gibbons and E. C. Chase. Mr. Burnham's last year of student life was spent as sole pupil of Hayward, the celebrated scholar, author and ex-professor of Harvard. It was while working with Mr. Hayward, and having in the house where they lived together a library of 10,000 volumes, that the love of architecture was first developed, Mr. Hayward, who was a critic in the arts, rendering much assistance, as also did a family friend, W. P. P. Longfellow, architect, a nephew and ward of the poet, since professor of architecture in Massachusetts Institute of Technology. Mr. Burnham's original programme of an advanced course at Harvard and two years in continental travel was abandoned, and in 1867 he came to Chicago and spent three years of work and study in the offices of Architect John M. Van Osdel (during his designing of the Palmer House), Loring & Jenney and Carter, Drake & Wight. Mr. Burnham was closely identified with the formation and general organization of the Western Association of Architects, and its first president, and, as chairman of several committees directing its working policy, notably that upon competitions, laid down rules that have entered largely into the working policy of the association ever since. It was a paper upon the subject by Mr. Burnham that directed the attention of members of both the Western Association and the American Institute to the desirability of the consolidation of the two national bodies which was effected last year.

John Wellborn Root was born in the southern part of Georgia. His father was a New Englander and his mother a native of Georgia. When young he went with his father and mother to Atlanta, and remained there until after the city surrendered to General Sherman. He was sent out through the blockade and placed in school at Claremont, near Liverpool, England, where he remained for three years, after which he entered the local Oxford examinations in the senior class, receiving the degree of Associate of Arts. In 1867 he returned to New York and entered the university of that city, remaining there until 1870, pursuing during these two years the classical architectural and engineering courses. After graduating, Mr. Root passed a year in the offices of architects James Renwick and John Snook and had charge of the erection of the Grand Central Depot. In the spring of 1872 he came to Chicago and entered the offices of Carter, Drake & Wight. In the summer of 1873 the partnership with Mr. Burnham was formed, the first building erected by the firm being a residence located on the southeast corner of Harrison street and Ashland avenue. The first work of any magnitude executed by the firm was the Calumet Club building, followed by the erection of the old Grannis Block and the offices of the C. B. & Q. Railway. The first tall office building erected by them was the Montauk Block, and since that work have put up the Calumet building, Counselman's Block, the Insurance Exchange, Rialto, Traders' and Commerce, Phenix, Rookery, Rand-McNally, Art Institute, Monadnock, and many other structures. Others in course of erection are the Masonic Temple, Woman's Temple, the new "Chicago" Hotel, and Chicago *Herald* building. They are also putting up office buildings in Kansas City, San Francisco and Tacoma, and the Society of Savings building in Cleveland. Mr. Root is a past president of the Western Association of Architects and is now secretary of the American Institute of Architects.

Frederick Law Olmsted was born April 26, 1822, in Hartford, Connecticut. During 1845–46 he took a special course in engineering and agriculture at Yale and subsequently became a farm laborer to acquire the details of agriculture. His attention being called to landscape gardening and architecture, he went to Europe in 1850 to study carefully the ornamental grounds of the continent and England, and an account of this journey is given in "Walks and Talks of an American Farmer in England." In 1852–53 he traveled through the southern states to examine their agricultural resources and to study the effect of slavery upon agriculture, the journey resulting in the writing of several books on the subject. In 1856 a commission was formed to design the Central Park in the city of New York. In 1857 premiums were offered for the best plan for the grounds and the prize was awarded to Mr. Olmsted in conjunction with Calvert Vaux. Until 1861 he supervised the construction of the park according to his plan. In 1861 he was appointed a member of the commission to inquire into the sanitary condition of the United States forces and was elected its general secretary. While engaged in this work from 1861–64 he resided in Washington, and the results of this commission can be found in Charles J. Stelle's "History of the United States Sanitary Commission." After the war he assisted in the organization and direction of the Southern Famine Relief Commission, and was also Vice-President of the New York State Charities Aid Association. In 1871 he directed the attention of the territorial government of the District of Columbia to the "parking system" for the streets, and his suggestions have been carried out. During this time he was active in founding the American Museum of Natural History and the Metropolitan Museum of Art in New York. In 1872 he was president of the Department of Public Parks in New York, and in 1876–77 he prepared the plans of the present street system of most of New York north of the Harlem river. Other prominent landscape works of Mr. Olmsted are Riverside and Morningside Parks of New York, Prospect and Washington Parks in Brooklyn, Belle Isle at Detroit, and the parks and parkways of Buffalo, Bridgeport, Connecticut, and Montreal; also the staircases and terrace and the outworks and grounds of the capitol at Washington. Washington and Jackson Parks, Chicago, were designed by him in 1870, but while the general plan has been carried out the spirit of the work has never been complied with, much to the detriment of the landscape effect of these parks. He was the first commissioner of the National Park of the Yosemite and Mariposa Grove, and was architect of the city parks of Boston, Philadelphia, Baltimore, Wilmington, Delaware, and San Francisco, of the Joint Committee on Buildings and Grounds of Congress, the Niagara Falls Reservation Committee, and the trustees of Harvard, Yale, Amherst, and other public institutions. Since 1886 he has worked upon an extensive system of parks and parkways for Boston and upon a plan for the landscape improvement of Boston harbor. The private work of Olmsted & Co. is even larger than their public creations.

Henry Sargent Codman has been connected with the firm for the past seven years, and was born in Boston. After a four years' course of training in architecture and engineering at the Boston Institute of Technology, and a course in the Lowell School of Design, he was employed for three years with Mr. Olmsted, and then went to Paris, where he spent two years under the instruction of Edward André, the celebrated landscape engineer. After extensive traveling through Europe and America, studying the different park systems, Mr. Codman became an active partner in the firm, and has been engaged upon the later works of the firm.

Abraham Gottlieb is a native of Taus, Bohemia. He was born in 1837. His father being a prominent merchant of that city, he received a liberal education and spent ten years at Prague in the university and polytechnic school. After completing his studies he spent seven years railroading, during the last two years being assistant engineer of the Emperor Francis Joseph Railroad. In 1866 he came to this country and located in Chicago, spending several months as draftsman in the offices of architects, and was for a time in the office of Architect August Bauer. Mr. Gottlieb then became connected with the L. B. Boomer Bridge Works. This concern afterward became the American Bridge Company and Mr. Gottlieb was its chief engineer until 1872, then engineer of the Keystone Bridge Company of Pittsburgh, having charge of the western business of the house until 1878, when he was elected president and general manager, and moved to Pittsburgh, returning to Chicago in 1885 and opening an office for himself as engineer and contractor. He has since resided here, and is now the consulting engineer of the Edgemore Bridge Works, of Wilmington, Delaware, and the Mount Vernon Bridge Company, of Mount Vernon, Ohio. During his connection with the American Bridge Company he built the first bridge across the Missouri river at Omaha, the bridge across the same river at Leavenworth, and all the bridges on the Missouri, Kansas & Texas Railroad, also the bridges on the

Intercolonial Railroad, of Texas. When connected with the Keystone Bridge Company Mr. Gottlieb built the bridge across the Ohio at Point Pleasant, Virginia; the bridge at Henderson, Kentucky, for the Louisville & Nashville road; the bridge at Plattsmouth, Nebraska, for the Burlington & Missouri River road; the bridge at Blair, Iowa, for the Northwestern; the bridge over the Susquehanna for the Baltimore & Ohio; the bridge over the Schuylkill for the Pennsylvania road, and the bridge over the Harlem river at New York for the Park Commissioners. Since his return to Chicago he built the Broad Street Depot at Philadelphia, and the lighthouse for the government of Mexico in Tampico Bay. He also built the Mexican mining pavilion at New Orleans. He has built a number of the viaducts and bridges in Chicago, and done work for the Wisconsin Central, Pennsylvania, Lake Shore, Michigan Southern, Chicago, Burlington & Quincy, and other railroads.

## Association of Ohio Architects.

THE fifth annual meeting of the Association of Ohio Architects was called to order at the Boody House, Toledo, Ohio, August 22, 1890. President E. O. Fallis in the chair.

The roll was called by the secretary and the following members responded to their names: F. O. Weary, J. W. McLaughlin, George W. Rapp, J. N. Richardson, J. A. Kremer, J. W. Yost, Charles I. Williams, N. B. Bacon, Bernard Becker, E. O. Fallis, J. Boucherle, C. H. Owsley, Robert E. Dexter, John H. Boll, Charles A. Creiger, and R. C. McLean, of Chicago, honorary member.

There were also present W. W. Carlin, of Buffalo, N. Y., and John M. Donalson, Zach. Rice, R. E. Roseman, of Detroit.

On motion the reading of the minutes of the last meeting was dispensed with.

The President: The next in order is the report of the treasurer.

J. W. Yost: I desire to submit the following report:

| | |
|---|---|
| Received from H. C. Lindsay, treasurer | $ 25.30 |
| Received for fees and dues | 100.00 |
| Total | $125.30 |
| Paid out | 00.00 |
| Balance in treasury | $125.30 |

(Signed) J. W. YOST, Treasurer.

Mr. Rapp: I would like to ask if all the members have paid up to date.

Mr. Yost: They have not, sir.

Mr. Rapp: Does this report show how many have and how many have not paid?

Mr. Yost: No, sir; I could make up such a report, but not now, as I have not all the names with me, but there is a considerable amount not paid, probably $200.

On motion the report of the treasurer was accepted.

It was moved and seconded that the treasurer prepare a list of all members whose dues were not paid up to date, and that it be made a part of his report.

The President: The next in order is the report of the Executive Committee.

Secretary: The Executive Committee desire to offer Jacob J. Rueckert, of Cincinnati, and Charles A. Creiger, of Springfield, as members of this Association. Mr. Rueckert is recommended by George W. Rapp and J. W. McLaughlin. Mr. Creiger is recommended by J. W. Yost and Charles I. Williams.

Ballot was taken and Mr. Creiger and Mr. Rueckert were made members of the Association.

The President: The next in order is the report of the Committee on Nominations.

Mr. Yost: I move that a committee of three be appointed to make nominations for officers for the ensuing year, and that they report two tickets.

Motion seconded and carried.

The President: I will appoint Charles I. Williams, Frank O. Weary and George W. Rapp as nominating committee. We will now have the report of the Committee on Legislation.

Mr. Yost: I will simply say there has been no progress made of a practical nature during the past year, therefore I have no report to make.

The President: We will hear the report of the Entertainment Committee of the Institute convention last fall.

Mr. Rapp: As chairman of that committee I will read the report of the treasurer, H. E. Siter:

| | |
|---|---|
| Receipts—Amount subscribed by and collected from architects | $565.00 |
| Amount subscribed by and collected from laymen | 490.00 |
| | $1,055.00 |
| Expenditures—Total | $886.00 |
| Thirty per cent. of $565 returned to architects | 169.00 |
| | $1,055.00 |

(Signed) H. E. SITER, Treas. E. C., A. O. A.

I will state here that the architectural drawing exhibit was quite a feature of the entertainment, and we all agreed that we ought to help the Cincinnati Sketch Club out a little in paying their expenses.

It was moved and seconded that the report be placed on file.

The President: The next in order is new business.

Mr. Yost: Mr. President, since our last annual meeting it is well known that the Western Association of Architects, of which the Ohio Association was a subordinate, has passed out of existence and has become a part of the American Institute. The present Constitution and By-Laws of the Ohio Association are not exactly in conformity with the requirements of the American Institute in a few particulars, and I presume it would be necessary, if we continue our existence, either to act as an entirely separate body, or become a part of the American Institute and form a Chapter under their Constitution. For my own part I think it will be best for us to become a part of the American Institute and form a Chapter under their Constitution. I, therefore, move that a committee be appointed to report such changes and amendments as are necessary in our Constitution, in order that we may become a Chapter in the American Institute.

Mr. Rapp: I would like to ask whether that committee is to report at this meeting.

Mr. Yost: I would suggest that it do, unless there is some obstacle.

Mr. Kremer: If it is decided that the Ohio Association is to become a Chapter, there are quite a number of our members who are not members of the American Institute. What would become of them? I think it would be no more than right that we all have a vote on it.

Mr. Yost: I presume that will come up if somebody seconds the motion whether this committee ought to be appointed or not.

Mr. Rapp: Mr. President, I desire to offer the following as a substitute to Mr. Yost's motion: That the Executive Committee to be elected at this meeting be instructed to prepare a list of changes to be made in our Constitution and By-Laws so as to be in harmony with those of the American Institute of Architects, and also to prepare a list of Fellows of the Institute who are now members of the Association of Ohio Architects; that the name of this association be changed to Ohio Chapter of American Institute of Architects; that a letter ballot be taken on the above, and that these changes shall go into effect immediately after a majority vote has been cast in favor of the same.

Mr. Yost: I accept the substitute.

Substitute seconded and carried.

The President: Is there anything else in the way of new business?

Mr. Kremer: Mr. President, I move that the Committee on Legislation be instructed to endeavor to effect a change in the law relating to the letting of contracts for public buildings.

Motion seconded and carried.

Mr. Yost: Mr. President, I am glad to say that we have with us today a gentleman of considerable prominence in association matters; a gentleman who is now vice-president of the American Institute, and who has been president of the Western Association. We are very glad to see that he is with us, and would like to hear from Mr. W. W. Carlin, of Buffalo. (Applause.)

Mr. Carlin: Gentlemen of the Ohio Association, I can say that I am very glad to be here, and that I am very glad for this opportunity of visiting the Ohio Association and making so many pleasant acquaintances, which I hope will be continued in the future, but I hardly know what to say or what I would be called upon to say at this time. I am very glad to see the move that has been made and the step taken looking toward the forming of an Ohio State Chapter, which I think is the general movement of the state associations. In fact, several have already reported to the Constitution Committee of the Institute, asking for instructions and copies of the charter, and I think before the convention in October that most of the associations which were formed under the old Western Association as state associations will have become chapters, and I think this is a move in the right direction, although the state associations should be kept up, as the legislation which will be handled through the American Institute of Architects must be handled through the state associations. Our state laws are all different, and whatever new movements the members desire to make will largely have to be done by the state associations. To do this properly they should be members of the parent body; they should report to that body in the annual convention and all reports would be there compared and listened to by the members in the different parts of the country, and the knowledge which would be gained by the experience of the members in the different cities would be a benefit to all. There has been a feeling in our state on the part of some of the members that we belong to too many associations. We have in New York State the New York Chapter of the American Institute, which is composed largely of members residing in New York City and immediate vicinity. We have also what is now the Western New York State Association of Architects, which was formed under the old Western Association, and which is now being formed into a chapter. Then we have a Buffalo Chapter, a Rochester Chapter, a Syracuse Chapter, an Albany Chapter and the Architectural League, so that we have an architect residing in New York State that will belong to not less than four and paying dues in every one, and the question comes up whether or not we have not too many demands. A proposition has been made to drop the State Association, but when we think of the question of legislation and what can be done in all parts of the state in relation to influencing their representatives in the legislature, it seems that for the present at least we must keep it up. The way we propose to do is to make the dues in the State Association merely nominal, and, as we meet but twice a year, our expenses will be comparatively light, and we can admit members outside of the state from cities where there are no state associations, thus opening the door to the American Institute of Architects through this state association, for I think at the next meeting of the American Institute the Constitution will be so amended that no one can be a member of the American Institute of Architects unless he is a member of some local chapter. Unless we keep up the State Associations the architects in the smaller places where there are not enough architects to form a local chapter would not be members of the American Institute, but they can join the State Chapters and through them get into the American Institute. I am very thankful to this association for their pleasant entertainment and the many favors which I have received at their hands. I hope to be able to welcome you all to New York State, and if not there, certainly at the Institute meeting at Washington. (Applause.)

Mr. Williams: Mr. President, your Committee on Nominations for officers for the ensuing year report the following tickets:

President, F. O. Weary; vice-presidents—J. N. Richardson, C. I. Williams, J. A. Kremer, Bernard Becker and J. W. McLaughlin; secretary, G. W. Kramer; treasurer, J. W. Yost; Executive Committee—C. F. Schweinfurth, C. H. Owsley, G. W. Rapp and H. A. Linthwaite. Place of meeting, Akron, Ohio.

President, J. W. Yost; vice-presidents—G. W. Rapp, W. M. Aiken, L. Peters, N. B. Bacon, F. E. Cudell; secretary, J. A. Kremer; treasurer, H. E. Siter; Executive Committee—Charles Crapsey, E. O. Fallis, C. I. Williams and F. O. Weary. Place of meeting, Columbus.

The President: It is moved and seconded that we proceed to ballot, and that tellers be appointed.

Motion carried.

The President: I will appoint Mr. Owsley and Mr. Kremer as tellers.

Mr. Kremer: I move, in order to facilitate voting, that we vote for either Akron or Columbus.

Motion seconded and carried.

The result of the ballot was in favor of Akron, which, of course, elected the ticket with F. O. Weary as president.

Mr. F. O. Weary: Gentlemen, I feel thankful to you for the honor which you have conferred upon me, and the reception which I have received. I am glad to know that Akron is to be honored with the visit of so prominent a body of architects, and that I will be able to entertain my brothers in the profession in our future Chicago. I have been anxious for years to have some of the profession call on us, but we are so out of the way that we very seldom receive visits of this kind and are glad to know that our city has been selected as the place of the next meeting. We have the tile works and the sewer-pipe works that will interest the architects. Again thanking you, I hope to see you all there, and hope there will be a good attendance. (Applause.)

Mr. Rapp: Mr. President it is with deep regrets that I report the death of Mr. A. C. Nash, a member of this Association from Cincinnati. Mr. Nash was one of the pioneers of the profession in this state, coming thirty-two years ago from Milwaukee, where he practiced for some time. Mr. Nash was a prominent member of the American Institute of Architects, the Ohio Association and the Cincinnati Chapter. He has executed a large number of public buildings and a very large number of churches and private residences, which will remain as monuments of his professional ability. I would move that our secretary express the sympathy of this Association to the bereaved family.

The motion was seconded.

Mr. Kremer: I move that a committee of three be appointed to write these resolutions and that they be spread on the minutes of this meeting. I think Mr. Rapp will accept that as an amendment.

The amendment was accepted, seconded and carried.

The President: I will appoint as a committee to prepare these resolutions, Mr. Rapp, Mr. Kremer and Mr. Yost.

Mr. Yost: Mr. President, there is a little matter I would like to speak about. There are a number of members who are delinquent for their dues for this year, and some of them for dues for years past. I think none of those present is included in that number, but I would like to suggest that if they see the others it would be a good thing to call their attention to the fact, so that the amounts that are due the Association can be paid in, in order to enable us to meet the bills that will come in within a few days.

Mr. Dexter: I think it had better come from the treasurer.

Mr. Rapp: I think the executive has power to act in this case. I think the treasurer should report to the Executive Committee and they take action. I make this as a suggestion.

Mr. Rapp: Mr. President, in regard to the death of Mr. West, your committee offer the following resolutions:

WHEREAS, in the inscrutable wisdom of the Great Architect of the Universe He has withdrawn from us our valued member and associate, A. C. Nash, a man honored and honorable alike in his profession and in all the responsibilities of life, therefore be it

*Resolved*, That we deeply mourn his loss and miss his counsel and advice in our deliberations, but trust that our loss is his gain, and that we will continue to cherish his memory.

*Resolved*, That these resolutions be spread upon the minutes and that a copy of them be furnished to his bereaved family, to whom we extend our heartfelt sympathy. (Signed,) GEO. W. RAPP, JUL A. KREMER, J. W. YOST, } Committee.

The resolutions were seconded and adopted as read.

Mr. Kremer: Mr. President, I move that the late secretary write out these resolutions and send them to the family of the deceased.

The motion was seconded and carried.

The following resolution was offered and adopted:

*Resolved*, That the thanks of the Association be tendered to the Toledo members for the excellent entertainment provided and enjoyed by members and guests, and to the Toledo *Blade* for its excellent reports of proceedings.

On motion, the Convention adjourned to meet at Akron on the third Thursday of August, 1891.

The evening was devoted to the work of revising the Constitution and By-Laws, which will be sent to each member for ballot vote. The revised articles are as follows:

## CONSTITUTION.

### ARTICLE I.

The name of this Society shall be, The Ohio Chapter of the American Institute of Architects.

### ARTICLE II.

The objects of this Chapter are: To unite in fellowship the architects of the State of Ohio, and to combine their efforts so as to promote the artistic, scientific and practical efficiency of the profession.

### ARTICLE III.

SECTION 1. This Chapter shall consist of regular members of associate members, and of corresponding and honorary members.

SEC. 2. Any architect in this state, engaged in the honorable and exclusive practice of his profession, shall be eligible to election as an associate member, after having practiced at least one year.

SEC. 3. An associate member shall become a regular member of this Chapter upon official notice to the Chapter of his election as a Fellow of the American Institute of Architects.

SEC. 4. A regular member of this Chapter must be a Fellow (in good standing) of the American Institute of Architects.

SEC. 5. Architects from other states may be elected as regular members or associate members of this Chapter, upon the recommendation of the Executive Committee, and upon conformity with this constitution and the by-laws.

SEC. 6. The status of an architect is hereby defined as follows: An architect is a professional person, whose occupation consists in originating and supplying artistic and scientific data preliminary to, and in connection with the construction of buildings, their appurtenances and decorations; in supervising the operations of contractors therefor; and in preparing contracts between the proprietors and contractors thereof.

SEC. 7. No member shall accept direct or indirect compensation for services rendered in the practice of his profession, other than the fees received from his client.

### ARTICLE IV.

The officers of this Chapter shall be a president, two vice-presidents, a secretary, a treasurer and an executive committee.

### ARTICLE V.

This constitution may be amended by a two-thirds vote of members present at any meeting of the Chapter, provided that a notice of such proposed change shall have been mailed to each regular member and associate member by the secretary, on the order of the Executive Committee, twenty (20) days before the date of said meeting.

## BY-LAWS.

### ARTICLE I.—MEMBERSHIP.

SECTION 1. Regular members and associate members of this Chapter shall be practicing architects, whose professional status shall be demonstrated to comply with the constitution, and who shall be admitted or elected in the manner hereinafter set forth.

SEC. 2. Fellows of the American Institute of Architects may be elected to regular membership by the Executive Committee of this Chapter.

SEC. 3. Candidates for admission as associate members shall submit to the Executive Committee, through the secretary, an application for membership, made as follows:

"*To the Executive Committee of the Ohio Chapter of the American Institute of Architects:*

"My full name is.....

"My business address is.....

"The name of my firm is.....

"I have practiced the profession of architecture for.....years.

"The accompanying photographs, numbered respectively 1, 2 and 3, show completed buildings, erected from my plans and under my supervision:

"No. 1 is a [here give general description of building]. No. 2, do. No. 3, do.

"The accompanying drawings are [here enumerate and describe such drawings as the candidate desires to submit.]

"We, regular members of the Ohio Chapter of the American Institute of Architects, hereby indorse Mr.....'s application for associate membership. We know him personally; we know his work; we believe him to be worthy of membership.

.....

....."

All applications of, and any further information concerning candidates, shall be considered confidential by the Executive Committee, which shall absolutely reject or provisionally accept each application, and shall cause the secretary to send to each regular member and associate member the names and addresses of the candidates provisionally accepted, together with those of their indorsers.

In the case of each candidate, these ballots are to be opened and counted by the Executive Committee at its next meeting.

If, upon counting the letter ballots received, it is found that three (3) or more ballots have been cast against the admission of any candidate, he shall be declared rejected. Any rejected candidate may make a new application after the expiration of one (1) year.

☞ See Article III, Section 3 of Constitution.

SEC. 4. Members who have relinquished the practice of the profession, and thereby lost their right to membership of the Chapter, also civil engineers and other scientific men, as well as amateurs of distinction, may be elected corresponding or honorary members of the Chapter at any annual meeting, upon the recommendation of the Executive Committee.

Corresponding and honorary members shall have all the privileges of the Chapter, except that of voting and of eligibility to office. The membership of an honorary member or corresponding member shall cease whenever he engages in the active practice of architecture.

SEC. 5. All resignations shall be made in writing to the Executive Committee, and addressed to the secretary; but a resignation shall not release the member presenting it from any obligation to the Chapter, and all interest in the property of the Chapter of members resigning, or otherwise ceasing to be members, shall be vested in the Chapter.

SEC. 6. All questions of discipline shall be acted upon by the Executive Committee, which shall decide any questions of unprofessional conduct, nonpayment of dues, or action conflicting with the constitution or by-laws, and acting under this by-law the Executive Committee may pass a vote of censure, or drop a name from the roll, but no such action shall be taken until the accused shall have had an opportunity to be heard in his own defense.

### ARTICLE II.—MEETINGS.

SECTION 1. The regular meeting of this Chapter shall be held annually, and occur on the third Thursday of August, unless otherwise ordered by the Executive Committee, thirty (30) days' notice having been given; the place of meeting to be chosen at each preceding regular meeting.

Special meetings of the Chapter may be called at any time by the Executive Committee upon the written request of three (3) members, notice of the object, time and place of said meeting having been mailed to each member at least ten (10) days before the meeting.

SEC. 2. *Rules of Order.*—The meetings of this Chapter shall be conducted according to Roberts' Rules of Order.

SEC. 3. *Quorum.*—For the transaction of business twelve (12) shall constitute a quorum, of which seven (7) shall be regular members.

### ARTICLE III.—ELECTION OF OFFICERS.

An election for officers of the Chapter, as enumerated in Article IV of the Constitution, shall be held at each annual meeting. The election shall be by ballot. A plurality vote shall elect. The officers elected shall enter office on the 1st day of January following their election, and their term of office shall be for one year. Regular members only shall be eligible to office.

### ARTICLE IV.—DUTIES OF OFFICERS.

SECTION 1. *President and Vice-Presidents.*—It shall be the duty of the president to preside at all meetings of the Chapter, or, in his absence, this duty shall devolve on the vice-president present from the city where the meeting is held or that nearest to the same. The president shall be chairman of the Executive Committee.

SEC. 2. *Secretary.*—The secretary shall keep a record of the proceedings of the Chapter and of the Executive Committee, of which he shall be a member, and of all matters of which a record shall be deemed advisable by the Executive Committee.

The Secretary shall notify the members of their election, shall keep a roll of the members of the Chapter, shall issue notices for all meetings of the Chapter

and shall conduct its correspondence. He shall also be the keeper of the seal of the Chapter.

The records and correspondence, except in relation to qualifications of candidates for membership, shall at all reasonable times be open to the inspection of members of the Chapter.

SEC. 3. *Treasurer.*—The treasurer shall collect all funds of the Chapter and disburse the same on the written order of the president and secretary.

He shall keep the accounts of the Institute in books belonging to it, which shall be at all times open to the inspection of the Executive Committee; he shall report at every annual meeting, and oftener, if required, on the state of the funds.

The accounts of the treasurer shall be audited by a committee of three (3), elected by the Chapter at the first session of each annual meeting. The committee shall report before the close of the meeting.

SEC. 4. *Executive Committee.*—The Executive Committee shall consist of the president, secretary and of three (3) other regular members of the Chapter. The president and secretary of the Chapter shall be respectively chairman and secretary of this committee. Three (3) members of this committee shall constitute a quorum. It shall be their duty to exercise control over the property and general interests of the Chapter, to receive applications for membership, and act upon the same in accordance with the by-laws; to consider complaints and expel members of the Chapter for cause; to act as a committee of arbitration on all questions submitted to it by regular members and associate members, and generally to have control of its welfare and interests.

All calls for extra meetings shall be issued by the Executive Committee. This committee shall report to the Chapter at each regular meeting. All appeals from the action of the Executive Committee shall be to the Board of Directors of the American Institute of Architects.

If any member of the Executive Committee is absent from three (3) consecutive meetings, the other members shall have power to declare his place vacant, and proceed to elect his successor for the remainder of his term.

ARTICLE V.—FINANCE.

SECTION 1. *Initiation Fee.*—All regular members and associate members shall pay an initiation fee of ten dollars ($10) within three (3) months from the time they are notified of their election by the secretary. If not paid within that time, their election shall be declared void by the Executive Committee.

SEC. 2. *Dues.*—The dues of regular members and associate members shall be $3 per year, payable in advance, during the month of January of each year.

SEC. 3. Members elected after July 1 shall pay one-half of the annual dues for that year.

SEC. 4. No member who is in arrears for dues shall be entitled to vote, and if twelve months in arrears, shall be subject to a penalty of twenty per cent, and shall be reported by the treasurer to the Executive Committee for action under Article I, Section 6.

SEC. 5. Actual traveling expenses and hotel bills of the Executive Committee in attendance at any special meeting, and the necessary disbursements of the president, secretary and treasurer, or any special committees, shall be paid by the treasurer upon the written order of the president and secretary, when audited by the Executive Committee.

SEC. 6. A sum not to exceed $5 for each member in *actual attendance at any annual meeting* shall be allowed to defray the expenses of entertainment at such annual meeting.

ARTICLE VI.—AMENDMENTS OF BY-LAWS.

The by-laws of this Chapter may be amended by a two-thirds vote of the members present at any meeting of the Chapter, provided that a notice of such proposed change shall have been mailed to each regular member and associate member by the secretary, on the order of the Executive Committee, twenty (20) days before the date of said meeting.

The following circular letter to members will accompany the copy of constitution and by-laws mailed to members, in accordance with the resolution:

ASSOCIATION OF OHIO ARCHITECTS,
OFFICE OF THE SECRETARY,
AKRON, Ohio, September 10, 1890.

DEAR SIR,—The following resolution was passed at the annual Convention held at Toledo, August 21–22, 1890:

RESOLUTION.

"*Resolved*, That the Executive Committee to be elected at this meeting be instructed to prepare a list of changes to be made in our constitution and by-laws so as to be in harmony with those of the American Institute of Architects, and also to prepare a list of fellows of the Institute who are now members of the Association of Ohio Architects. That the name of the association be changed to Ohio Chapter of the American Institute of Architects. That a letter ballot be taken on the above, and that these changes shall go into effect immediately after a majority vote has been cast in favor of the same."

In pursuance thereof, the Executive Committee herewith submit to the members a copy of the revised constitution and by-laws for adoption or rejection as a whole.

The same should be unanimously adopted, thereby making our association a Chapter of the American Institute of Architects, as hereafter a fellow of the American Institute of Architects must be a regular member of some Chapter, and only associate members of Chapters are eligible for election to fellowship of the American Institute of Architects.

A full vote of the association is desired on this important matter, as the annual convention of the Institute is close at hand, and the report of such reorganization must be filed at least two weeks before the convention.

Hence it is of the utmost importance that you give this your immediate attention, and return the inclosed ballot indicating your choice, properly signed, and inclosed in the accompanying envelope, to F. O. Weary, chairman of Executive Committee, Akron, Ohio.

Ballots must be in the hands of the chairman on or before noon of September 30, 1890.

By order of the Executive Committee.

F. O. WEARY, Chairman.
C. F. SCHWEINFURTH.
C. H. OWSLEY.
GEO. W. RAPP.
H. A. LINTHWAITE.

The entertaining ability of the Toledo architects, represented by Mr. Fallis, the president, was taxed to the utmost as a large conclave of Knights Templar made it almost impossible to procure hotel accommodations. This was overcome, and the entire visit was voted a great success. The programme included a trip in a chartered steamer to the Put-in-Bay islands. Here a banquet was served. In viewing the islands, architectural beauty in the buildings was so noticeable by its absence that a visit by the architectural profession was timely. A change is approaching, however, as Mr. Fallis is building a hotel there. A walk to that site was attempted, but darkness overtook the visitors, and stealing apples and seeking "short cuts" through the woods occupied the attention of some. A number of ladies were in attendance, among them being Mrs. C. I. Williams, Mrs. F. O. Weary, Mrs. W. W. Carlin, Miss Lizzie M. Valter, Mrs. L. McClure. The voyage back to Toledo was not devoid of incident. The weather was bright, but the sea rough, and there were several who wished it might have been more gentle. There were a few "sailors" in the party who stayed on deck, but a large majority sought the seclusion of the cabin until port was reached, and a restaurant was raided to fill the vacancy left by the ravages of the sea. A carriage drive, including a visit to the public library and insane asylum, closed the entertainment.

## The Interstate Exposition at Chicago.

THE eighteenth annual exhibition of the Interstate Industrial Exposition of Chicago was inaugurated September 3, to be continued six weeks. In the art galleries a most interesting collection of oil paintings and water-colors, not less attractive than the collections of previous years, which have earned for this annual exhibition the highly complimentary title of "the American Salon" are on exhibition. In view of the possibility that the coming exhibition may be the last of this important series, at least the last held in the old familiar galleries under the old familiar auspices, it may be well to glance back over the field that they have covered and the work that they have accomplished for the people of Chicago and the West.

When the Exposition company was first organized, and the building erected, the art department was not considered an important feature of the enterprise. The first exhibition was held in 1873, only two years after the fire and the very year of the panic, at a time when American art was not a conspicuous factor of the nation's development. A few painters of originality and force — men like George Fuller and William M. Hunt — were isolated exceptions to the poverty of thought and barrenness of technique which gave the lie to the youthful enthusiasm of our country, and seemed to proclaim that however daring was our conquest of material difficulties, in the higher realms of beauty we could create nothing. Bierstadt in landscapes and Healy in portraits were fairly representative of the taste then mostly in vogue.

During the seventies the art galleries of the Exposition reflected this tendency of American painters, though the collections were chiefly made up of foreign pictures, loaned from various owners, the schools of Munich and Dusseldorf occupying far more space than any exhibition would give them today. In 1876 a large collection of pictures belonging to Mr. J. Russell Jones was shown, besides other pictures. In 1879 a fine collection of metal work was loaned by the Pennsylvania Museum. The following year Miss Sara T. Hallowell, who had assisted in the work the year before, was for the first time made responsible for the exhibition, a trust she has since held, except in 1886. For her first exhibition Miss Hallowell was able to secure an extremely fine loan collection, including valuable examples of the Barbizon school, pictures which several Chicago collectors would gladly give enormous prices for now, but which then passed unappreciated by a public which had scarcely heard of the French masters. Among these paintings was Thomas B. Scott's beautiful Corot "On the Banks of the Loire"; but the American people, like the French, required time to learn to love Corot.

In 1881 another loan collection was shown. A breezy set of studies in the water-color room came from F. Hopkinson Smith, and illustrated that artist's trip to Cuba. Another feature of that year was the Caldwell collection of faience, from Philadelphia. In 1882 the famous Claghorn collection of etchings, of which a portion had been shown two years before, was brought from Philadelphia and chronologically arranged. This collection, which was purchased afterward by the Garretts of Baltimore, richly illustrates the history of etching, from Durer and Rembrandt to Whistler.

About this time the directors of the Chicago Exposition sent Miss Hallowell abroad to secure pictures from the American artists resident in Paris and London. From them and from the New York and Boston exhibitions was gathered together, in 1883, a collection representative of the latest achievements of American art.

From that year until the present time the same policy has been pursued. A single exception was the exhibition of 1886, when, owing to physical exhaustion, Miss Hallowell resigned her position, and the work fell into incompetent hands. In 1887 she resumed it, and secured in addition to the pictures selected abroad, a number of valuable canvases from the Seney collection of Boston. During all these years the aim of the managers has been to keep pace with the progress of American art and show the best works of each year, whether painted at home or abroad, including with these a few fine examples of foreign masters.

During the eighteen years' existence of this exhibition, a new spirit has vitalized American art and sent it thrilling onward. If the next score of summers and winters shall bring as much enlightenment and movement, it will not be long before, as the editor of *L' Art* puts it, "France will have to reckon with artistic America as she has already reckoned with industrial America."

## Mosaics.

"OUR FLAG; OR THE EVOLUTION OF THE STARS AND STRIPES," is the title of a neat little volume, edited by Robert Allen Campbell, and published by H. E. Lawrence & Co., Chicago. The book includes a number of selections, poetical and prose, on the subject, and a concise history of the many flags used before the present design was adopted. The book is especially readable at this time, when all that relates to our country's history is of unusual interest.

THE *Polytechnic* is the name of a new magazine to be published in Chicago, the initial number of which will be issued October 1. Like the London magazine of that name, it will be the organ of a Polytechnic Institute, which in this case has been lately started in Chicago, and will be modeled after the famous London institute of similar name, an interesting account of which was given in the *Century* for June. The first number will be largely descriptive of the work of the Institute, especially its trade schools, a peculiar feature of which is that students may earn their expenses while in attendance, and can learn almost any trade. As this promises to solve the vexed apprenticeship question, all Master Associations are warm supporters of the

movement. An article on the new Evening Medical College of Chicago is also included in this number. The ladies will be interested in the description of cooking, millinery and dressmaking schools of the Chicago Polytechnic Institute. Published at the southeast corner Madison St. and Fifth Avenue, Chicago, Ill. Sample copy, 10 cents.

An important movement in trade journalism is the organization of the American Trade Press Association, recently completed, which will, if carried out as it is hoped, unite trade publications by a common interest, and extend to such publications the benefits that union should always bring. Only legitimate trade publications of the first class are admitted, and each publication is entitled to one vote. It is the purpose of the organization to appoint agents in cities not generally reached, for the collection of news, subscriptions, advertisements, etc., and these will be appointed by the board of directors. Foreign agencies will also be established in the same manner. Legislative matters will occupy the attention of the association, and postal regulations will be looked after, and under the direction of proper officers the association cannot but be of great value to not only its members, but the entire trade press. The members to date are as follows: The *American Exporter*, representing the export industry, published by Root & Tinker; the *Boot and Shoe Recorder*, Boston; The Inland Architect, Chicago; *Confectioners' Journal*, Philadelphia; the *Upholsterer*, Philadelphia; *Builder and Decorator*, Philadelphia: *Carriage Monthly*, Philadelphia; *Sanitary News*, Chicago; *Dry Goods Economist*, New York; *Electrical World*, New York; *Farm Implement News*, Chicago; the *Haberdasher*, New York; the *Clothing Gazette*, New York; the *Druggists' Circular*, New York; the *Oil, Paint and Drug Reporter*, New York; *Light, Heat and Power*, Philadelphia; the *Western Brewer*, Chicago; *Bonfort's Wine and Liquor Circular*, New York; *Jewelers' Circular*, New York; *American Miller*, Chicago; *Paper and Press*, Philadelphia; the *North-Western Lumberman*, Chicago; *Michigan Artisan*, Detroit; *National Bottlers' Gazette*, New York; *United States Tobacco Journal*, New York; *Harness; Coal Trade Journal*, Chicago; *Street Railway Journal; Hatter and Furrier;* the *Dramatic Mirror*, New York. The officers of the association are: President, C. R. Clifford, Philadelphia; first vice-president, Henry A. Elliott, New York; second vice-president, Clarence E. Stump, New York; secretary, William M. Patton, Philadelphia; treasurer, Benjamin Lillard, New York; board of directors, Joseph W. Gibson, New York; W. L. Terhune, Boston; Thomas Hudson, Chicago.

## Association Notes.

ONTARIO ASSOCIATION OF ARCHITECTS.

At a meeting of the directory of the Ontario Association of Architects at Toronto, August 5, which includes the council which under clause 6 of the Ontario Architects act was appointed July 22 by the lieutenant-governor, the following officers for the ensuing year were elected:

President, G. W. Storm; vice president, F. J. Rastrick; secretary, S. G Townsend; treasurer, D. B. Dick; solicitor, J. W. Curry.

The council enjoys the honor of being the first council under the first act for the registration of architects ever passed, and while the movement was commenced several years ago in the United States, to a province of Canada belongs the honor of first securing legal recognition for the architectural profession. The nine architects composing the council are as follows:

For three years, W. G. Storm, Toronto; D. B. Dick, Toronto; F. J. Rastrick, Hamilton. For two years, K. Arnoldi, Ottawa; W. Edwards, Ottawa; E. Burke, Toronto. For one year, W. Blackwell, Peterborough; D. Ewart, Ottawa; S. G. Curry, Toronto.

## Our Illustrations.

Residence of Mr. Thomas H. Williams, Jersey City, N. J.

Akron Savings Bank, Akron, Ohio; Weary & Kramer, architects.

Stable for Profile House, White Mountains; Loring & Phipps, architects, Boston.

Robert Lee monument at Richmond, Virginia, reproduced from *Harper's Weekly*, for the convenience of draftsmen in the Clark medal competition.

Chicago Architectural Sketch Club, competition for a Lich gate for a country cemetery; designs of Oscar Enders, awarded first and second places.

Photogravure plate of plaster casts, face and reverse, of design modeled by Johannes Gelert, sculptor, Chicago, for the Robert Clark medal, to be awarded in competitions among draftsmen in the United States under thirty years of age, conducted under the auspices of the Chicago Architectural Sketch Club.

Depot and office building for the Monterey & Gulf Railroad at Monterey, Mexico; Isaac S. Taylor, architect, St. Louis, Mo. The building is to have all modern improvements in slow combustion construction, plumbing, private water supply, etc. Walls of American brick and native black marble. Cost, $75,000.

PHOTOGRAVURE PLATES.

(*Issued only to subscribers for the Photogravure edition.*)

The Webster School, New Haven, Conn.; L. W. Robinson, architect.

Residence of Mr. R. A. Waller, Buena Park, Illinois; J. L. Silsbee, architect, Chicago.

Residence of Architect Charles I. Williams, Dayton View, Dayton, Ohio. Four full page plates are given, showing the following views: Exterior, reception hall, dining room, library.

Masonic Temple, Chicago; Burnham & Root, architects. The building, which is to occupy the northeast corner of State and Randolph streets, will cover a quarter of a block, or 170 feet on State street and 114 feet on Randolph street. The site was covered by several stone buildings from four to six stories in height; these are now being torn down. The height will be eighteen stories, exclusive of the high gable, which will add two stories to this. The height from street level will be 254 feet, though a slight change may be made, carrying the structure to the height of 265 feet. It will be steel and fireproof construction, the wall facings of brick and terra-cotta, the lower stories in stone. The main entrance will be forty-two feet high and twenty-eight feet wide, which opens into a rotunda containing fourteen elevators arranged in a semi-circle. The two upper floors will be fitted as lodge rooms, etc., for the Masonic fraternity and the remainder of the building for stores, offices, etc., wide halls taking the place of streets and the whole composing a mammoth emporium. The cost of ground leases was $1,100,000 and the estimated cost of the building is $2,000,000.

## Synopsis of Building News.

**Atlanta, Ga.**—Architects W. W. Goodrich & Son have prepared plans for the following work: Church building for Third Presbyterian Church, to cost $10,000; building for Home of the Friendless, to cost $15,000; residence for H. W. Yarbrough, to cost $12,000, and residence for L. E. O'Keefe, cost $7,000.

Architects Bruce & Morgan have plans for residence for Mr. H. T. Phillips, to cost $6,000. Also for the Hon. E. P. Rice, a stone residence, to cost $18,000; M. Sipes, contractor.

**Baltimore, Md.**—Architect George Archer is preparing plans for the new Central Presbyterian Church. The building will be of stone and brick, and will cost about $20,000.

**Chicago, Ill.**—Architects Burnham & Root are making plans for the following work: A ten-story office building, to have a pressed brick and stone front; to be of fireproof construction, and cost $500,000; to be erected at Atlanta, Georgia. A Methodist church, to be erected at Evanston; to cost $30,000; to be constructed of rock-faced stone. A ten-story office building, size 130 by 160 feet; to cost $1,250,000; to be erected at San Francisco, California, for D. O. Mills, of New York. It will have a white marble front for two stories, and above that of cream-colored brick and terra-cotta. It will be of steel construction and thoroughly fireproof, and be fitted up with all the latest improvements. The brick is made there, and the steel also. Contracts will be let the end of this month. They are now tearing down old buildings. The Masonic Temple: Work will be commenced immediately; they will begin tearing down the old buildings at once, and get the ground ready as quickly as possible. The corner-stone is to be laid in October. The front will be of pressed brick and terra-cotta. For William Brown, at Evanston, a two-story basement and attic residence; to cost $20,000; to be of frame, with stone basement; have hardwood interior finish, hot water heating, and the sanitary specialties. For W. F. Goudy, a two-story basement and tall-roof residence, to be erected at 46 Astor street. It will have three fronts of cut stone, and cost $35,000. The foundation is now being put in.

Architect W. H. Drake is making plans for a three-story residence, size 26 by 80 feet; to cost $11,000. It will have a stone front, hardwood finish, hot water heating, and be erected on Calumet avenue, near Thirty-fourth street, for W. H. Fleming. For W. C. Reebie, a three-story warehouse, to be built at 546 Sheffield avenue; to have a Collinsville pressed brick front; to be of mill construction, and cost $20,000.

Architects Flanders & Zimmerman are preparing plans for the Shakespeare Memorial Theater, to be built on the lot at present occupied by the First Regiment Armory, on Jackson street, next to the Leland Hotel. It will be an exact copy of the Shakespeare Memorial Theater at Stratford-on-Avon, England. The front will be of stone, terra-cotta and brick, and will be decorated with scenes from Shakespeare's plays It will be heated by steam, lighted by electricity, and have all the improvements; the cost will be about $150,000.

Architects Froman & Jebson: For Charles Kotzenberg, a two-story basement and attic residence, to be erected corner of Garfield Boulevard and Peoria street. Anderson pressed brick and Bedford stone front, and modern improvements; cost $9,000.

Architects Frederick Bauman and J. K. Cady: For C. P. Wheeler, a two-story basement and attic residence to be built at Evanston. Frame, stone basement, bathrooms, closets, stained glass, furnace; cost $7,000. For Mrs. Woods, a two-story residence, to be built on Ray street, near Twenty-ninth street and Prairie avenue; stone front, bathrooms, closets, mantels, leaded glass, furnace, etc.; cost $6,000.

Architects I. K. & A. B. Pond: For Franklin H. Head, a three-story and basement residence; size 32 by 76 feet, to cost $20,000, to be erected on State street, corner of Banks. It will have a front of Anderson brown brick and stone, with brick bays, plate glass windows, mahogany, birch and oak interior, elevator, dumb waiters, hot water heating, etc.

Architect Theodor Karls: For John Weivertz, a four-story and basement store and flat building, to be built at 224 E. North avenue; St. Louis pressed brick, and brownstone front; cost $12,000. For L. Kroth, a three-story and basement store and flat building, to be built on Lincoln avenue, near Belden; Bedford stone front, and modern improvements; cost $10,000.

Architect F. R. Schock: For F. L. McClure, at Elgin, Illinois, a two-story basement and attic residence; to cost $7,000. Frame and bowlders; hardwood finish; stained, plate and beveled glass; hot water heating; making plans.

Architect D. A. Lapointe: For Paul Dumond, a three-story and cellar flat building, to be erected at 124 Warren avenue. Stone front; bathrooms, closets, mantels, electric bells, speaking tubes; stained glass; cost $15,000. For James Arnold, a three-story stone and flat building, size 45 by 120 feet; to be built on the northeast corner of Fairfield avenue and Lake street; to have a mottled brick front, with stone trimmings, and all the modern improvements, and cost $16,000; making plans. Preparing plans for a three-story and basement flat building, size 50 by 65 feet; to cost $15,000; to be erected on Park avenue, near Leavitt street; pressed brick and stone front, and all the improvements

Architect Julius H. Huber: For J. W. Flynn, making plans for a three-story flat building, to be built on State street, between Fifty-fourth and Fifty-fifth; to have stone front and modern improvements; cost $9,000. For John Walter, planning a two-story frame dwelling, to be built at Lockport, Illinois. For the McGuire Manufacturing Company, on Morgan street, near Austin avenue, a two-story factory, size 75 by 117 feet. For John Froelich, making plans for a four-story flat building, to be built on Ohio street, near State; stone front and modern improvements; cost $12,000.

Architects John Woollacott & Son: For Louis Wille, four two-story and basement dwellings, to be built on York place, near Evanston avenue; Bedford stone fronts; furnaces, and all the improvements; cost $15,000.

Architect W. J. Van Keuren: For S. S. Niles, a three-story and basement store and flat building, at Oak Park; St. Louis pressed brick and brownstone; bathrooms, mantels, stained glass, furnace; cost $15,000; preparing plans. For Joseph Schlund, six two-story frame dwellings, at Harlem, Ill.

Architect A. M. F. Colton: For McCormick Theological Seminary, three residences on Chalmers place; to cost $25,000. For R. N. Hitchcock, on Fullerton avenue, two residences; to cost $12,000. For C. W. Lesher, a three-story residence; to cost $25,000. For F. H. Hurdon, at Zanesville, O., a three-story residence; cost $7,000. For C. T. Jukes, on Cleveland avenue, a three-story residence; cost $6,000.

Architects Bell & Swift: For C. H. Morse, taking estimates for residence; to cost $40,000. Also making plans for five-story factory; to cost $20,000.

Architect W. L. Carroll: For Mrs. Alice M. Kirby, making plans for four residences; to cost $60,000. Also planning store and flat building; to cost $15,000.

Architect J. H. Moore: For H. J. Evans, residence corner of Sacramento avenue and Washington boulevard; cost $20,000.

Architect Thomas Wing: For George V. Hankins, a four-story apartment building, corner of Twenty-ninth and Wabash avenue; Tiffany pressed brick and

brownstone; cost $40,000. Also made plans for remodeling building on Van Buren street, next to Art Institute, for Chicago Athenæum; Tiffany pressed brick and Connecticut brownstone; steam heat, elevators, electric light; cost $85,000.

Architects Robbin & Charpie: For James J. Baird, at Lansing, Mich.; remodeling opera house; cost $30,000.

Architect George W. Maher: For A. F. Shuman, on Fifty-sixth and East End avenue, a six-story hotel; to cost $100,000.

Architect J. A. Thain: For Mrs. Minnie Morris, corner of Ashland avenue and Polk street, a three-story residence; to cost $35,000. For M. Lawton, on Greenwood avenue, near Forty-fourth street, a three-story frame residence; to cost $15,000.

Architect J. H. Wagner: For Chicago Safe and Lock Company, at Waukegan, a two-story factory; to cost $60,000. Also made plans for six-story building, and two-story addition to Otis building on Illinois street; steam heat, steel beams, etc.; cost $40,000

Architect Perley Hale: For J. C. Beifeld, on Bowen avenue, two three-story residences; Bedford and Portage stone fronts; cost $16,000. For James Phelps, on Fifty-seventh and Halsted, five two-story dwellings; to cost $20,000.

Architect Swen Linderoth: For F. L. Malmstedt, Berwyn, Illinois, a two-story residence; to cost $6,000. For F. H. Brammer, a two-story frame dwelling, in Lake View. For Lystad & Anderson, on Division street, a four-story bakery; to cost $12,000.

Architect C. R. Adams; for M. Hastreiter, at Rogers Park, a two-story frame dwelling. Also making plans for an Episcopal church, to be built at Baraboo, Michigan; stone all round; pews, stained glass, furnace, etc.

Architects Pond & Pond: For J. M. Reddy, a three-story store and flat building, to have a frontage of 196 feet, corner of Cottage Grove avenue and Seventy-first street.

Architect F. R. Schock: For O. W. Potter, on Lakeshore Drive, corner of Burton place; a handsome three-story residence; to be built of granite, and cost $80,000.

Architect Charles Marcotte, of Kansas City, Mo.: For E. F. Brady, a three-story residence, corner of Newport and Cornelia, Lakeshore Drive; to cost $150,000.

**Cincinnati, Ohio.**—Reported by Lawrence Mendenhall:

I am safe in saying that building troubles are settled for this season, and I think that if we are favored with a pleasant fall and temperate winter all will be well. Many of our large buildings are "making their presence felt," and rearing their heads above the level of mortar beds. In this connection I make the remark that the mixing of mortar should be done in the cellar and not on pavement. Being poked in the ribs with a hoe handle, or daubed with slacking lime, is not conducive to man's happiness. Then, again, whenever possible the pavement should be finished as quickly as the occasion will admit of, thus obviating the jostling of pedestrians on narrow walks. In *this* way buildings make this presence *felt*, but when a glorious building is at last constructed, these disagreeable inconveniences, however glaring, are almost lost in admiration of the work of the architect and builder.

Architect S. S. Godley has the following plans to report: Mr. M. Marks, 530 Court, a residence; materials, frame, slate roof, pine finish; plumbing, stained glass, furnace, etc.; cost $5,000. For Mr. A. R. DeLeon, 24 West Ninth street, a similar residence, to cost $6,000.

Architects Crapsey & Brown have prepared plans for a bank and flat building at Robinson, Ill. Material, brick, stone, tin roof; vault; plumbing, etc.; cost $12,000.

Architect H. E. Siter has drawn plans for schoolhouse of twenty-four rooms. Material, brick, stone, galvanized iron; plate glass, furniture, etc.; cost $70,000. Also another of twelve rooms, to cost $40,000. Address Board of Education, Cincinnati.

Architects Samuel Hannaford & Sons report: For the Cincinnati Riding School, a building. Materials, brick, stone, iron; mantels, plumbing, tin roof, etc.; write to J. R. Murdock, Esq., Equitable Block. For P. J. Sorg, Esq., Middletown, Ohio, a store and opera house; materials, brick, stone, iron; elevators, plate and stained glass, decorations, etc. For John B. Morris, a factory; materials, brick, stone, iron; elevators, slate roof, plumbing, etc.; size 90 by 100 feet; three stories.

Architect Gustave W. Drach reports the following: For F. G. Hawekotte, 53 Webster street, city, a residence; materials, brick, stone, galvanized iron; furnaces, stained glass, etc.; cost $6,500. For Mr. Stanley Bowdle, a residence; materials, frame, slate roof; furnaces, stained glass, plumbing, etc.; cost $4,000.

Architect John H. Boll reports: For the Board of Education, Addeyston, Ohio (near Cincinnati), a schoolhouse of four rooms; materials, brick, stone; slate roof, furnace, school furniture, etc.; cost $9,000. For Mr. August Muth, a bakery; materials, brick, stone, iron; tin roof, steam heat, plumbing, etc.; cost $8,000.

Architects DesJardins & Hayward report: For Presbyterian congregation, at Norwood, Ohio, a church; materials, frame, slate roof; pews, organ, pine finish, stained glass, furnace, etc.; cost $6,000. For John W. Siebern, a double house; frame, pine finish, plumbing, gas, slate roof, wood mantels, etc.; cost $5,000.

Architect J. J. Rueckert has prepared plans for County Auditor Fred Raine; materials, frame, pine finish, mantels, slate roof, stained glass, plumbing, etc.; cost $5,000.

Architect L. Pickett reports: For the congregation of the Church of the Holy Angels, a house of worship, to be erected at Sidney, Ohio; materials, pressed brick, slate roof, stucco ceiling, stained glass, pipe organ, hardwood finish, etc.; cost $35,000.

Architect W. W. Franklin reports: For Mr. Samuel Mackenzie, 111 Sycamore street, a residence; materials, stone, slate roof, electric bells, stained glass, hot water heat, hardwood finish, plumbing, etc.; cost $18,000. For Thomas Deneal, Montgomery pike, city, a residence; materials, brick, stone, pine finish, stained glass, furnace, plumbing, etc.; cost $4,500. For E. M. Costello, tailor, Sixth and Vine streets, a double residence; materials same as above; cost $4,500. For H. H. Brunning, 101 West Pearl street, a residence, same as above, except plumbing; cost $3,000.

**Columbus, Ohio.**—Architects Elah Terrell & Co.: For I. D. Parsons, a stone and frame residence, size 35 by 50 feet; cost $6,000. For the Logan School Board, a brick schoolhouse, size 60 by 140 feet; cost $25,000. For H. A. Lauman, a seven-story hotel, size 64 by 100 feet; pressed brick and stone, natural gas; cost $50,000. For Mrs. Cummings, at Marion, Ohio, a four-story business block, size 82½ by 130 feet; pressed brick; cost $20,000. For the M. E. Church at Williamsport, a brick and stone church, size 60 by 75 feet; cost $10,000; contractor, H. Faunaugh. For the Shepardson College, Granville, a brick and stone dwelling, size 60 by 60 feet; cost $20,000; contractor, D. M. Shepardson. For G. D. Raine, at Memphis, Tenn., a stone residence, size 50 by 80 feet; cost $20,000. Also, for L. W. Overton, Memphis, Tenn., a 40 by 60 feet stone dwelling; cost $16,000; contractor, I. Reid. For C. M. Hubbard, a pressed brick residence, size 35 by 60 feet; cost $6,000; contractor, D. McGrauth. For E. W. Swisher, a brick and terra-cotta dwelling, size 30 by 60 feet; cost $5,500. For F. Hughes, a frame residence, size 30 by 50 feet; cost $5,000. For E. B. Kurtz, a brick and terra-cotta dwelling, size 30 by 50 feet; cost $5,000; contractor, Chas. Carter.

The building outlook would be of the very best if it were not for the difficulties arising from the labor agitation.

The Columbus Y. M. C. A. will erect a $100,000 Association building.

**Denver, Colo.**—Architects Lang & Pugh: For T. L. Cachcart, a two-story brick dwelling; cost $10,000.

Architect I. Hodgson: For J. A. McMurtrie, a stone residence; cost $45,000.

Architect H. F. Lee: For E. Heilder, a brick terrace; cost $20,500.

D. S. Green will erect a two-story brick dwelling, size 36½ by 50 feet; cost $7,000.

Architect Wm. Quayle: For Messrs. Zang & Zeigel, a three-story building, brick, with stone trimmings, size 50 by 125 feet; steam heat; cost $30,000; work to be commenced September 15. From this time forward building operations promise to be very extensive.

**Detroit, Mich.**—Architects Scott, Kamper & Scott: A three-story brick dwelling, 39 by 96 feet, for Mrs. Van Est; W. H. Holland & Son, builders; cost $13,000. A two-story brick dwelling, 43 by 60 feet, for W. H. Hollands, to cost $7,000, and a $40,000 manufactory for the Detroit Radiator Works, on Chene street.

Architect G. W. Lloyd: A $14,000 residence for Michael Martz, to be located on Jefferson avenue. Also an addition to the Westminster Church chapel, to cost $13,000; Chapton & Vinton, contractors.

Architects Hess & Rasemann: A two-story brick dwelling, 32 by 36 feet, for Jos. Perrin, to cost $5,000. Eight two-story brick stores and dwellings, 196 by 60 feet, for Perrin Bros., to cost $19,000; Leo Schietele, builder. A two-story brick dwelling, 35 by 48 feet, for Mr. Meuller, to cost $5,000.

Architects A. C. Varney & Co.: For Thomas Kennedy, a block of four three-story brick stores and residences; cost $12,000. For Mrs. Lewis, a two-story double brick dwelling, 38 by 60 feet; cost $7,000; Jos. Dietz, contractor. A two-story brick dwelling for John Alley, 26 by 30 feet; cost $5,000. Also a three-story brick dwelling for W. W. Hannan, 20 by 60 feet, to cost $5,000.

Architects Rogers & McFarlane: A two-story brick store and residence, 35 by 60 feet, for John Knealey; to cost $5,500.

Architects Spier & Rolens: A one-story brick church, 100 by 220 feet, for the Sacred Heart of St. Mary's parish; to cost $125,000. A four-story brick dwelling, 32 by 64 feet, on Second street, for Mr. Moore, to cost $8,000.

Architect Peter Dedrichs: A two-story brick dwelling, 48 by 76 feet, for Saint Albertus parsonage; to cost $8,000. A two-story frame dwelling and barn, 35 by 57 feet, for G. Burlage; to cost $5,500.

Architects Donaldson & Meier: A four-story brick hotel for Mr. Perkins; to cost $5,000. A three-story brick store and dwelling, 20 by 74 feet, for Peter Koenig; to cost $5,000. A two-story frame club house for the Michigan Yacht Club, 115 by 80 feet, to be erected on Belle Isle, and to cost $8,000; Leo Scheible, builder.

James E. Scripp is about to erect a fine fire-proof eight-story block on the corner of Shelby and Laurel streets, to be occupied by the *Evening News*.

James Burtenshaw will soon build a block of stores and flats on the corner of Woodward avenue and Mt. Calm street.

Stephen Baldwin is erecting a two-story brick dwelling for the Detroit Home of Industry, from plans by M. L. Smith & Sons; cost $10,000.

**Little Rock, Ark.**—The plans of Messrs. Fred J. H. Rickon and Charles L. Thompson, associated architects of Little Rock, Ark., have been adopted for the Little Rock Permanent Exposition. The building will cost $100,000; contracts not yet let.

Architects Orlopp & Kusener have plans for the new Masonic Temple, to be erected at Fourth and Main; to cost $75,000; contracts not yet let.

**Los Angeles, Cal.**—Architect J. H. Bradbeer: For the Immanuel Presbyterian Congregation, a frame and brick church; concrete foundation; size 99 by 130 feet; cost $26,000; John Rebman, contractor. For A. C. Miller, a two-story frame residence and barn; size 37 by 53 feet; cost $4,500. For W. H. Griffin, a two-story frame dwelling; 48 by 55 feet; cost $3,600. For the Trustees of San Dimas, a one-story school building; size 52 by 36 feet; ready for figures.

Prospects are not very good here now except for small buildings, will take a year or so to get over our busted boom, but this city is bound to grow in the near future.

**Minneapolis, Minn.**—Architects Barnett & Record: For City Elevator Company, two-story brick elevator, size 68 by 100 feet; cost $18,000. The Twin City Club will erect a club house, to cost $4,000. The St. Anthony of Padua Society will erect a brick school and hall building; cost $10,000. For Mr. S. S. Farnham, a three-story brick tenement building; cost $20,000. For Whitmore & McMillan, a block of brick stores; cost $24,000. For C. S. Brackett, a two-story frame dwelling; cost $8,000. For Messrs. Kinney & Welcome, two-story frame dwellings; cost $10,000. J. S. O'Donnell will erect a stone residence, to cost $16,000.

**Pittsburgh, Pa.**—Architect T. D. Evans: For M. Oppenheimer, a nine-story business building, size 22 by 180 feet; brick, with tin roof; cost $50,000; Huckestein & Co., contractors.

Architect Frank P. Cooper, resident architect at the court house, has completed the plans for the buildings for the Standard Underground Cable Company, at Brinton. There are five separate buildings, a cable factory, insulating factory, a leading factory, a carpenter and machine shop, and a boiler and dynamo shop. The cable factory is 280 feet long, 80 feet wide and three stories high. The other buildings are 60 by 80 feet, and are one and two stories high. All are connected with covered passageways and traveling racks, so that material from one department can be conveyed to another without the inconvenience of handling. There is no similar building anywhere, either in extent or design, it is claimed.

Architects M. Armstrong & Co.: For H. K. Porter, one-story dwelling, 44 by 25 feet; brick; cost $6,000.

Architect F. O. Sauer: For Harry Davis, a three-story hall, size 30 by 122 feet; brick and iron; cost $10,000.

Architect S. Munsch has prepared plans for the new church to be erected at once by the German Evangelical Lutheran congregation at Johnstown, Pa.

Architects Longfellow, Alden & Harlow: For J. J. Vandegrift, an eight-story office building, size 60 by 120 feet; brick, with tile roof; cost $180,000; A. and S. Wilson, contractors. Also for the same, a two-story dwelling, 34 by 48 feet; brick, with slate roof; cost $10,500.

Architect W. S. Fraser: For A. J. Barr, a three-story dwelling, size 60 by 73 feet; stone, with slate roof; cost $31,000.

The Homeopathic Hospital will erect an addition to the present building; estimated cost $50,000.

**Salt Lake City, Utah.**—Architect R. Kletting: For Mr. Hooper, a five-story office building, brick and stone; cost $60,000. Also a five-story stone and brick Board of Trade building; cost $60,000.

Architects Carrol & Kern: For B. Roberts, four-story brick building; cost $25,000. For Walker Brothers, four two-story brick and stone dwellings; cost $18,000.

Architect W. E. Ware: For James Millspaugh, a two-story frame and brick dwelling; cost $6,000. For James Eager, a two-story frame dwelling; cost $5,000.

**Seattle, Wash.**—The foundation for the front part of the Young Men's Christian Association Building is completed. Bids will be called for at once to complete the whole building.

**Springfield, Ill.**—Architect George H. Helmle: For the Board of Education, additions to three schoolhouses; brick and stone, including heating and ventilating; cost $25,000. For Thomas W. Dresser, brick and stone store and office building, size 80 by 50 feet; cost $15,500. For H. C. Latham, pressed brick front store building, size 22 by 60 feet; cost $3,000. For J. H. Jurgens, two-story frame dwelling, size 21 by 48 feet, seven rooms; cost $2,500. For the Girard School Board, a two-story addition to schoolhouse; $3,600. Also for James B. Ricks, at Taylorville, a two-story frame dwelling, 34 by 50 feet, 8 rooms; cost $3,500.

**St. Louis, Mo.**—For T. Wogawodka, a three-story brick tenement house; cost $6,200; contractor, J. Wilkinson. For Mrs. McCarty, a two-story brick dwelling; Schepfling & Peterson, contractors.

Architects Eckel & Mann: For the city of St. Louis, a four-story brick city hall, to cost $1,150,000.

The Missouri Railroad Company will erect a brick freight building, to cost $15,000.

M. Forster will erect a brick store, to cost $30,000; A. H. Haesseler, contractor.

J. A. Sendan will build a brick store and dwelling; cost $7,900.

Mr. John Meier, a six-story brick store; cost $30,000.

**Tacoma, Wash.**—Bids for the erection of the new city hall are now being received. Architects Hatherton & McIntosh have prepared the plans.

Architect T. C. Houser: For Reese, Redmond & Co., a four-story pressed brick and stone building; cost $50,000.

**Waltham, Mass.**—Architect H. M. Gragg: For A. H. Blackman, a two-story frame dwelling, size 24 by 40 feet; furnace heated; cost $4,000. For A. M. Goodwin, a two-story frame dwelling, size 41 by 43 feet; cost $3,900. For A. H. Beverly, a two-story frame, size 36 by 42 feet; cost $3,800. For E. L. Shaw, a two-story frame residence; shingle roofed; furnace heated; size 29 by 43 feet; cost $2,500.




DESIGN FOR THE ROBERT CLARK MEDAL.

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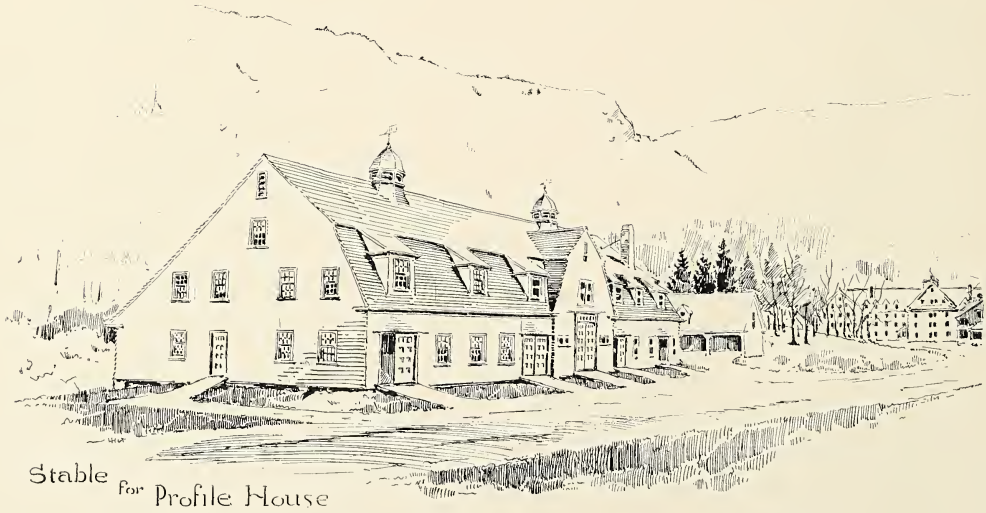
Marius Jean Antoine Mercié, Sculptor, Paris.

[A pedestal for this statue is the subject for the competition of 1890, for the Robert Clark medal.]



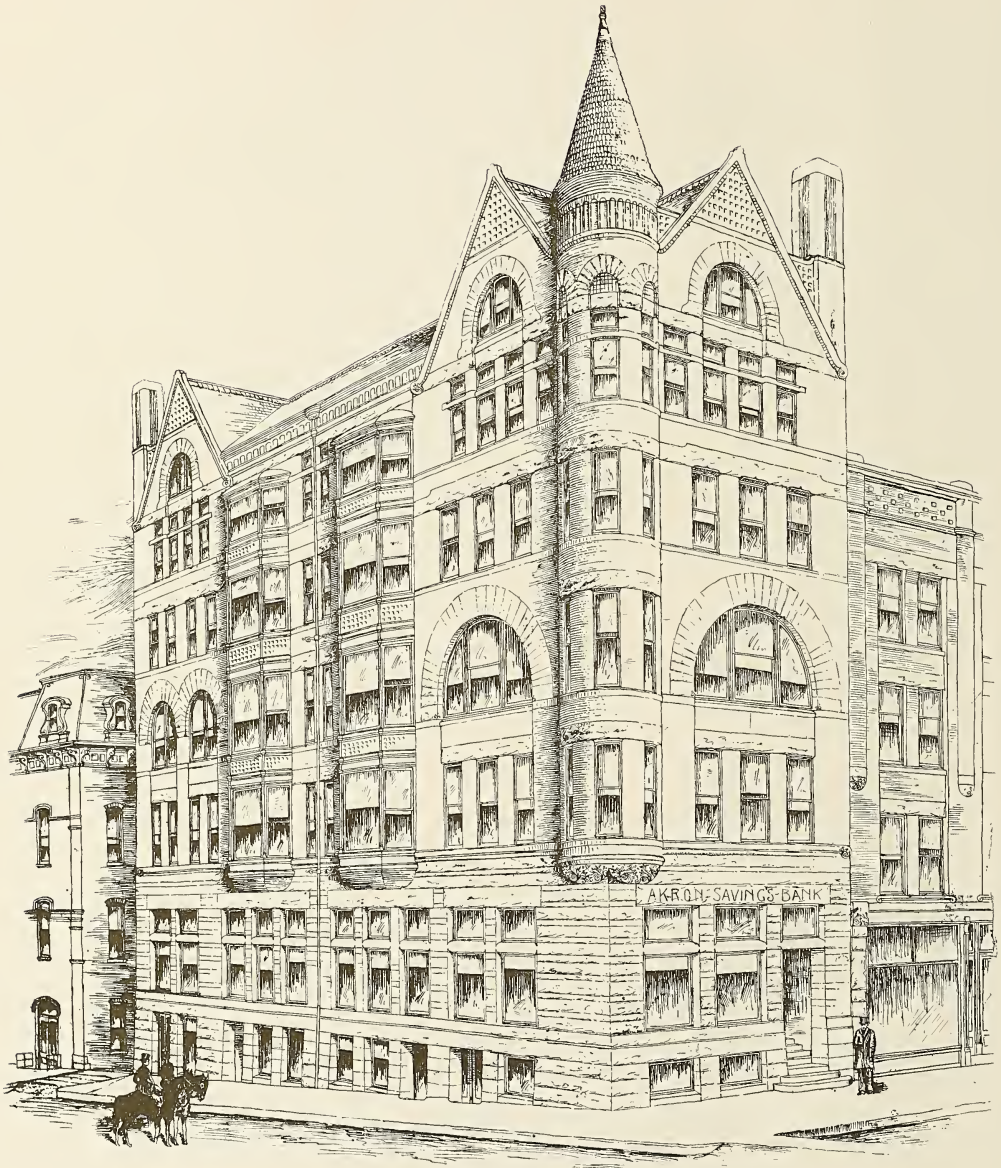
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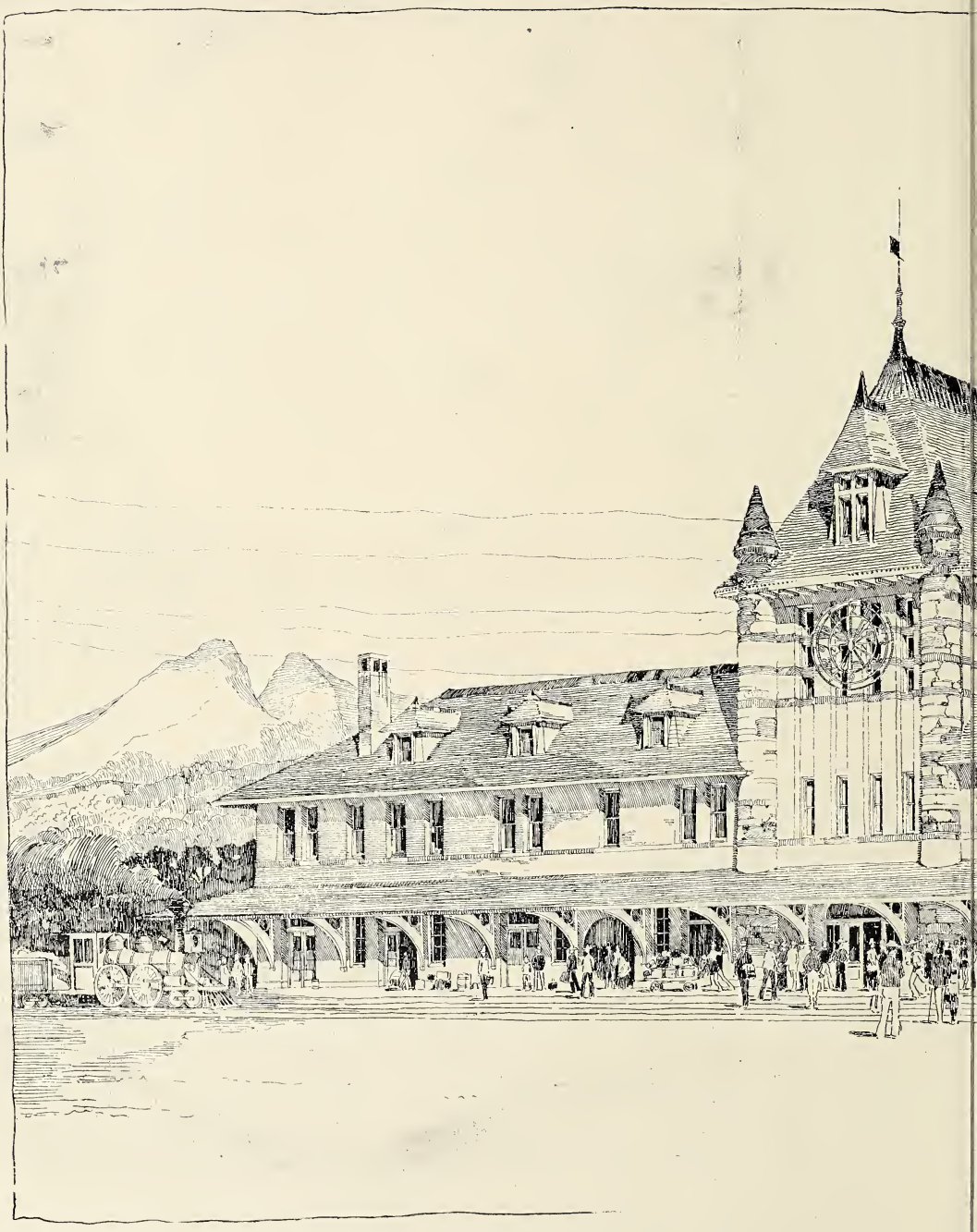
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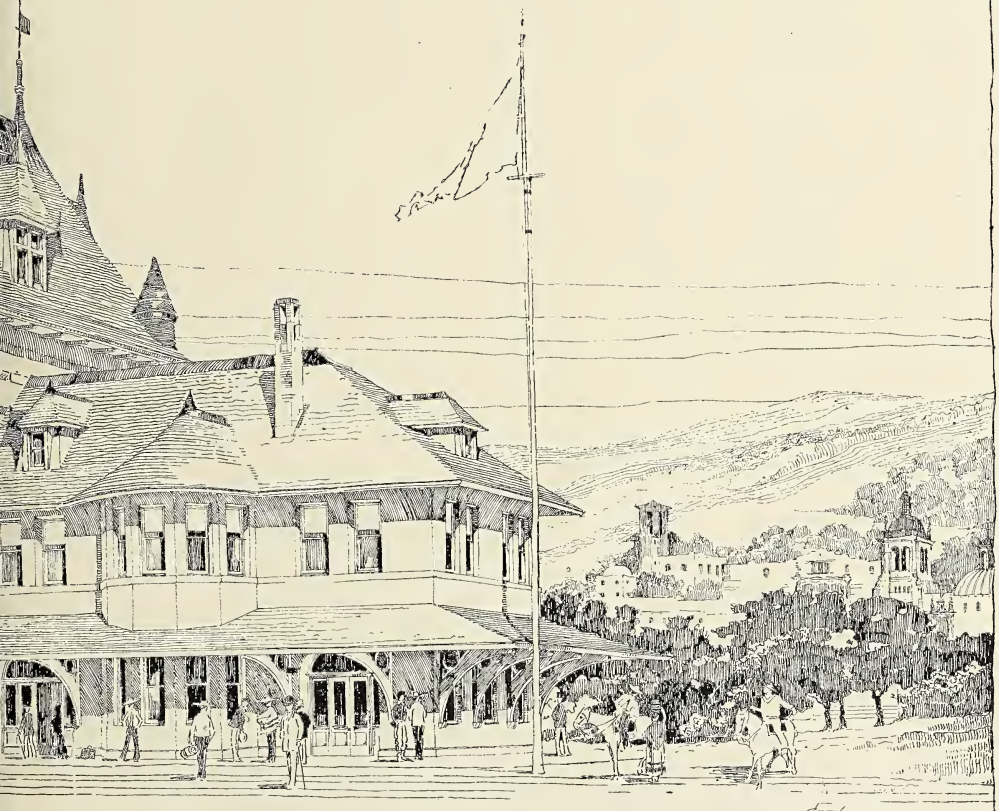
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DEPOT AND OFFICE BVILDING
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R.R. AT MONTEREY MEXICO
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OCTOBER, 1890.

# THE INLAND ARCHITECT

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IN THE WEST.

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*Committee on Formation of Chapters:* J. F. Alexander, chairman, La Fayette, Ind.; A. C. Bruce, Atlanta, Ga.; W. R. Briggs, Bridgeport, Conn.; S. A. Cook, Tacoma, Wash.; J. S. Mathews, Cheyenne, Wyo.; John Moser, Washington, D. C.; J. C. Stevens, Portland, Me.

*Committee on Competitions:* C. E. Illsley, chairman, St. Louis, Mo.; Adrience Van Brunt, Kansas City, Mo.; James H. Pierce, Elmira, N. Y.

*Committee on Railroad Transportation:* C. E. Illsley, chairman, St. Louis, Mo.; J. W. Yost, Columbus, Ohio; J. G. Cutler, Rochester, N. Y.; L. S. Buffington, Minneapolis, Minn.

*Committee on Uniform Contract:* O. P. Hatfield, chairman, New York, N. Y.; D. Adler, Chicago, Ill.; Alfred Stone, Providence, R. I.

**Second Convention A. I. A. at Washington.**

The second convention of the American Institute of Architects, which meets at Washington October 22, will probably be smaller in attendance than meetings of the national association usually are, judging from the latest information; but the proceedings will have strong bearing upon the future policy of the association. First in importance will be the settlement of the question bearing upon the relations of members of chapters and of chapters to the Institute. In the work of preparing a constitution and by-laws for the new association there were of necessity many measures incorporated that only practical trial would show the wisdom of, and it is not strange that a few oversights will have to be corrected at this convention. This matter of membership is the most important of them. At the first meeting of the Executive Committee it was decided to amend the constitution, making it obligatory for the candidate for full membership in a chapter to be a member in good standing in the Institute. This amendment was voted upon by letter ballot, and it may be assumed that it was adopted. In anticipation of this, several of the state associations, in reorganizing into state chapters, have made two grades of membership, making only Fellows of the Institute full members. The work of reorganization has not been as well attended to as it should have been, as at this writing, after repeated circular letters from the secretary, out of some twenty-eight local associations and chapters but eight are reorganized and have sent copies of the new constitution to the secretary, with a request for a charter. A new form of charter has been prepared and, after receiving the signatures of the president and secretary, will be distributed to the chapters, as far as qualified, at the Washington meeting.

**Matters of Importance before the Convention**

Another matter of importance that should and undoubtedly will be discussed at the convention at Washington is that relating to a congress of architects during the World's Fair, as suggested in our last issue. This is a matter of national importance, and should not be lost sight of. An interview with one of the architects from abroad who recently visited this country, in attendance upon the meeting of the Iron and Steel Institute, showed that the interest of foreign architects in our work was great and general. The committee upon education will probably make a more or less stereotyped report, but this committee has it in its power to become the most useful of all the standing committees. The day of office education for draftsmen is practically past. It is almost impossible for a young man with no knowledge other than a slight talent for sketching and mathematics to obtain a situation in an office. Architectural departments in colleges are looked to to supply the ever increasing demand for skilled draftsmen, and these are almost entirely "out of the market." To become a thoroughly competent draftsman, a year or more of practice under the direction of a practicing architect upon actual work is, in our opinion, almost indispensable. After the draftsman has graduated he must have this before he is "first-class" in any sense of the word, and if he does not receive the office instruction until after he has passed through his college course he is apt to be hampered with mannerisms or an undue belief in his personal ability.

This is certainly a subject for thorough investigation and earnest thought and work on the part of the committee on education, which is composed of the best known architectural educators in the country. They should study not only how they may make their course of study more effective, but what is necessary outside of this to make the draftsman of more value to his employer.

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Classification Scheme for the Columbian Exposition.

World's Fair matters, as far as the planning of buildings is concerned, have not progressed materially since our last issue. The work of adopting a proper scheme of classification has occupied the attention of the United States commissioners, and until this matter is settled, the work of the committee on buildings and grounds cannot go beyond the mere study of the topographical features of the different sites, and a general preparation for the serious work that will come (with a rush) when the classification plan is completed, the size of the buildings required for each department decided upon, the amount of money to be expended on each, its permanent or temporary character established, and its location in regard to the three sites definitely chosen. In the settling of all these questions the utmost activity prevails, and it is now expected that this work will be completed so that the active work of planning may commence before the next meeting of the Executive Committee of the National Board of Commissioners on October 18. The divisions will next be settled upon, and some change may be made in regard to the departments, but this will show how the work of the committee on buildings and grounds must rest until these details of classification are officially settled.

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Death of An Old St. Louis Architect.

Architect Alexander Cameron died at his residence in St. Louis on August 3, in the sixty-first year of his age. Mr. Cameron was a native of Nova Scotia. He came to this country when about twenty-one years of age, and after spending ten years acquiring experience in various parts of New England, he came West and located in St. Louis where he has remained ever since. Many public and private buildings and residences in St. Louis and its surrounding towns in Missouri and Illinois, bear testimony to Mr. Cameron's skill and ability, and his name was a synonym for honesty and integrity. He held the position of government superintendent during the last four of the ten years consumed in the construction of the St. Louis Custom House, and completed that edifice. The last important work on which Mr. Cameron was engaged was the addition of four stories to the Equitable building in St. Louis, making it a ten-story structure. His son, Edward A. Cameron, who will be remembered as the superintendent, under the late H. H. Richardson, of the Marshall Field building and the Glessner and MacVeagh residences in Chicago, is his successor.

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The Lesson of the Syracuse Hotel Fire.

There should be very little humor to be found in a hotel fire where a quarter or half a million of dollars' worth of property is destroyed and a number of lives are lost, but that is the predominant feeling that is apt to pervade the architectural mind when reading the accounts of the burning of the six-story Leland hotel at Syracuse. "Most magnificent hotel in western New York"; "cost $200,000"; but "the fire was discovered at 12:45 o'clock; in fifteen minutes the building was in flames from end to end, and before thirty minutes had elapsed, the walls had fallen, with the exception of the northeast corner." And then the veteran head of the family of hotel keepers is reported to have said, "the house was soundly built and considered fireproof." Is there anything in this but the most ghastly kind of a joke, like the Jonah fish story? Like most hotels, it was probably built "by the yard." An architect was probably selected because he would do the work cheaper than some other. The materials selected were the best he could secure to cover the largest amount of space for the least money. The problem was how to design and plan a structure that would look well and still involve the lowest estimate of cost. If he had the temerity to suggest that a six-story building should be constructed of steel and fireproofed, he would have been dismissed as a highwayman or a lunatic, and if he suggested frequent fire-walls and wire lath, he was probably told that ropes, fire-alarms, and a coil of hose or two was much better and cheaper. And so the hotel was built and admired by a public that looks at the elegant finish and goes to sleep with its confidence resting on a rope, a fire-escape and a mercury fire-alarm. The proprietor of one of the largest hotels in Chicago has been heard to talk just as Mr. Leland is reported to: "Safe? Safer than the Auditorium; a fire is an impossibility." And yet the building is a fire-trap, so far as material is concerned, and it will remain a menace to the traveling public and the surrounding property until it is pulled down or goes up in smoke in half an hour. The country is full of such hotels, and will be until the government, which should guard the public in public buildings and conveyances as well as on the streets, steps in and establishes regulations that will compel hotel buildings to be completely fireproofed in construction. The older hotels were built before the use of steel and tile made it possible to build cheap and yet incombustible buildings; but now there is absolutely no excuse, and those who do build as the hotel at Syracuse was evidently built, should be held criminally responsible. The joke would then become so costly that its perpetration by parsimonious owners would be stopped.

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Death of Architect E. T. Mix, of Milwaukee.

An architect who has for many years occupied a prominent position in the profession in the west, and who enjoyed to a superlative degree the confidence and esteem of his confrères, Mr. E. Townsend Mix, of Milwaukee, died September 23, at Minneapolis. Mr. Mix' antecedents were shipmasters of New Haven, Connecticut. After studying for his profession in the east, he came west in 1852 and formed a partnership with Architect W. W. Boyington, of Chicago. In 1856 the construction of the Newhall house at Milwaukee called for his services as superintendent, and since that time Mr. Mix has been engaged there in the practice of his profession. Many of the best buildings were designed by him and remain monuments to his ability, among them being the Chamber of Commerce, the Milwaukee club house, soldiers' home and Plankinton house. For several years Mr. Mix has been afflicted with consumption, and most of his time has been spent at Minneapolis, hoping in the dry air of that inland city to escape its effects. Here he designed the Washburne residence and other residences, the Temple court, Guarantee and Loan office buildings and the Minneapolis and the St. Paul buildings for the *Globe*.

## Views of an English Architect on Theater Construction.

BY ERNEST A. E. WOODROW, A. R. I. B. A.

PART IV.

MATERIALS.

The accepted significance of the term "fireproof" is an erroneous one. Materials that are incombustible are not therefore fireproof. Take for instance iron and stone, both recognized as fireproof substances, yet they are among the first materials to suffer under excessive heat or sudden changes of temperature. To show how mistaken some are in their ideas of the resisting qualities of material, I have known of lead being employed to cover a wooden floor as a protection from fire. Of all materials, lead in a fire is the most dreaded by a fireman. Their thick uniforms cannot withstand molten lead.

For such buildings as places of amusement, the foundations must be especially good, and all taken down to the same level as the foundations of the main walls of the building. The walls must be solid, of good, hard, well-burnt bricks, built in cement, and very thick, with all cross walls well bonded into the main walls. Wherever possible, use brickwork in preference to any other material. Every opening should be arched over, and the use of lintels, whether of wood or stone, discarded, and walls corbelled out to receive the fire resisting floors.

The floors of the various tiers should either be constructed of iron imbedded in concrete, or of timber in very large balks, of the hardest description, such as elm or oak, or a wood with qualities such as the Australian iron bark. Where wood is used it should be thoroughly protected from the action of fire by being thickly coated with gypsum or plaster of paris. The pit and stall floors should be of concrete covered with wood blocks for warmth and comfort; all the rooms behind the scenes should be similarly treated. The floors of corridors, passages and landings should be constructed of concrete supported upon brick arches, abutting against the brick walls. Never use iron joist where a brick arch can be turned.

Where iron is used to form the backbones of the constructions, it must be completely imbedded in cement concrete, with no face exposed to the fury of the flames. The concrete should be composed of the very best Portland cement, with the aggregate of calcined material, such as broken bricks or pottery, and where it is used for light partitions, of coke breeze. The staircase should be constructed of the same material or of some approved hard artificial stone or fire clay, with solid steps having a bearing both ends on brick walls. Avoid the use of stone. Captain Shaw remarks: "It yields to fire more rapidly than any other material; is the most dangerous of all materials, as at sudden changes of temperature it cracks, leaving a passage for smoke."

Iron is just as treacherous, owing to its loss of strength under great heat, and its liability to fracture. Anyone who has visited a site, after a big fire, where iron has been used largely in construction will have observed how the girders lay twisted and curled about like so much hoop iron, and columns bent over like half melted candles in an overheated room. By its contraction and expansion iron adds to the danger of fire, as frequently brickwork is pulled over by the ironwork, and walls which would have stood the fire unhurt are torn down. Where iron is used, it must be well bedded in cement, or fire clay; but even then avoid its use as much as possible.

Wood, when used in large balks, and of the harder sort, especially when protected with plaster, is preferable to naked ironwork. Wood is dangerous when used in thin slices. To again quote the greatest authority in these matters, Captain Shaw, "Wood will withstand a powerful dead heat upon its sides for an indefinite period without igniting, unless transverse sections of the fiber, such as knots, present itself to the action of the fire."

Plaster is a valuable fire resisting agent; it is light and resists fire for an indefinite period; it adapts itself to the entire enrichment and decoration of the auditorium, from ceiling and proscenium frame to circle fronts and private boxes.

In choosing materials for the construction of public buildings always give the preference to those that are already calcined and have undergone the action of great heat; these will not add fuel to the fire.

PREVENTION OF FIRES.

When a building has been planned and constructed so that it will in every way retard the spread of fire and panic, it should be considered how, if a fire breaks out in spite of all these precautions, it could be most effectually coped with.

Theaters or places of public amusement, from the nature of the business, and contents of the building, can never be *fireproof*, although it has been shown how they can be made fire resisting in every detail, and how, should a fire break out, it can be localized and burn itself out in the department in which it originates. Every means, therefore, should be taken to extinguish fire, not only in theaters, but concert halls, assembly rooms, churches, chapels, or wherever the public meet together in large numbers. Water is the element to overcome fire; it is cheap and can be obtained easily in large quantities; if a small bucketful is at hand at the first outbreak of fire, much loss of life and property would be prevented, not only in public but also in private buildings. The destruction of property from the use of large volumes of water is frequently as great as from the fire itself. Fire is allowed to grow with such rapidity, through simple means of extinction not being at hand and used at the outbreak, that measures on a large scale have to be employed to overcome it, when it has grown to considerable magnitude. One bucket of water during the first few minutes is of more value than the most powerful steamer a quarter of an hour after. Bearing this in mind, the most valuable item in the fireman's appliances is the fire bucket; of these there should be an unsparing supply in every room, passage, corridor, staircase and division of the building, always kept full of water. More good can be done with these at first than with any amount of fire appliances after; they can be used by the most uninitiated with the same effect as the most skilled fireman. Buckets should be hung above the floor level to prevent the water being spilt, and so as to be easily seen; the positions in which they are placed should be conspicuous and the buckets made as attractive in appearance as possible, by being painted a bright color and labeled "fire buckets" in distinct lettering.

Should the fire not be subdued in its first stage, more stringent measures will become necessary. Hand pumps, chemical engines, corridor engines, must therefore be provided.

Hydrants on a rising main, and on the constant supply, should be mounted on every floor, in every section of the building, and on the roof, at a distance of not more than forty feet apart, with hose and nozzle "married" ready for immediate use. All the necessary tools, axes, spanners and implements should be arranged on the walls above, and there should be a cock from which to fill buckets fitted to every hydrant.

In every dressing room, and in several places on the stage, in addition to the numerous fire buckets, there should be kept blankets always damp, not too wet and heavy, to be easily thrown round a person whose dress may have accidentally ignited. It is well also to keep blankets in other parts of the house, wherever hydrants or buckets are placed.

All fire apparatus in public buildings should undergo a frequent periodical test as to their condition by the licensing or municipal authorities. The pattern of the appliances in every town should be that of the municipal brigade, so that the building and town appliances might be used on any hydrant.

I have already mentioned the desirability of outside balconies, escape ladders, and the free use of windows for access to the building by the brigade escapes, or egress of persons, when cut off from all other mode of escape.

It would seem almost needless to say that the water supply should be at such a pressure that the highest part of the building could be reached from any hydrant. In some districts the water pressure is totally insufficient to carry a jet to the height of an ordinary house, which in consequence would be gutted before the arrival of the engines. Where large water tanks are supplied at a sufficient height above the roof to give the necessary force, care must be taken that they are always full, otherwise they will act as another example of false security and be worse than if they never existed. Better no tanks at all than an empty tank, which was thought to be full till it was wanted, and then found to be empty. There is, however, a great drawback in the usefulness of these tanks; as the fire destroys the walls or roof on which they stand, they fall, and are a source of danger instead of a source of security and safety.

All the provisions for fire extinction lose their value without a trained fire-watch. The theatrical fireman, who is a fireman in no sense of the word, beyond wearing a fireman's uniform for the few hours the house is open, is a delusion and a snare, and would be better conspicuous by his absence. A sham is worse than nothing. This is no office for an amateur; trained firemen, whose nerve and skill have been tested again and again, are the men who should have charge of the safety of the thousands who crowd into popular places of resort. In a theater, during the performance, the fireman should never leave the stage, and at the same time there should be other firemen in the auditorium, if only to be seen by the audience, to inspire them with

a sense of confidence and protection. The fire-watch should be continuous by day and by night. Firemen should have no other duties than those of their calling, otherwise there will always be an excuse for appliances not being in working order. Picked men are the only men fit for such responsible positions as firemen to public buildings, men in whom every confidence can be placed, and who are not required to visit tell-tale clocks on their rounds, to let their employers know that they are equal to their duties. If you inspire a man with the belief that you know he does his work well, he will ever strive to do it better; but when once a man thinks that you do not trust him, then you may expect to have the work shirked.

It should be the duty of the fireman to keep everything in working order and ready for any emergency. Imagine a stage in the full swing of a crowded pantomime or spectacular show unguarded by a proper fire-watch! Should the alarm of fire occur without any recognized authority to subdue it, the confusion and noise among the nervous, excitable people employed on the stage would, even supposing the curtain to be down, cause alarm and panic among the audience. From such small cause as a cry of fire, a shriek or a scream from an excited person a panic and stampede may arise, followed by death, bodily injury, or at the very least destruction to the nervous system for life. Yet there are still many places of public amusement where no fire-watch exists, the water supply insufficient and the fire appliance imperfect.

There should always be telegraphic communication with the nearest municipal fire station, but too much reliance must not be placed on emergency fire alarms which are supposed to go off of themselves by the influence of the presence of the enemy, heat. These alarms are apt also to come into play when no danger exists and create unnecessary alarm, the very thing to be always guarded against.

All check-takers and attendants should wear uniform so as to be easily identified and the better able to manage and direct the public. These men should be instructed in the use of the fire appliances by the regular firemen, to act as assistants to them when required.

It would be as well, perhaps, to review some of the causes of the origin and spread of fires in public buildings, as it will greatly help in providing the remedy.

Bad arrangements and planning, not dividing the many departments and sections into individual and separate fire risks. Not adopting the party wall system.

Danger from contiguous and adjacent houses and property; the misuse of portions of the premises as living and sleeping apartments.

Bad and inappropriate materials; scamped or faulty construction.

Fire-places, foul and imperfect flues, want of ventilation, overheated materials, darkness, dirt and non-removal of rubbish, trade refuse, etc.

Smoking; use of matches, candles, lamps; faulty gas fittings; unprotected or foul gas-burners; imperfect installation of electric light; carelessness in moving scenery; use of fire-arms, fire-works and colored fires on the stage.

The want of proper fire appliances and fire-watch.

Carelessness among the many tradesmen employed in not carrying on the work in the shops provided for the purpose. Lightning; concentrated rays of the sun by means of lenses; spontaneous combustion, and incendiarism.

When theaters and other places of public amusement are worked on the cheap, there will be danger. It is shortsighted policy on the part of the management, for the public bestow their patronage on the houses where they know that their welfare is best looked after. Many bills have been before the parliament for additional powers of inspection of public buildings, but have up to the present all been thrown out.

I began these papers by showing how anxious the managers and lessees are to do all in their power to protect the public, but there are times in the year when many theaters and halls drift into the hands of strangers, such as ambitious amateurs or stage-struck society actors. These take up the management, and there exists no supervision or inspection to protect the people who visit the building from the results of their inexperience. It is to be hoped that it will not be long before every town has its official inspector of public places of entertainment, a man qualified by technical knowledge, who will not unduly interfere or impose unnecessary requisitions upon the management, or allow the public to be endangered by the omission of the smallest item in the way of precaution and protection.

Fresh dangers may arise from alterations made from time to time in public buildings, unknown to the licensing body, which only continual and professional inspection can determine and remedy. Where this inspection is organized the public will be permanently protected.

The inspector should be endued with full power to enter upon any part of the premises at any time he may think fit. He should make his visits at the most unexpected times, before, after, or during a performance, in the daytime or even in the middle of the night, the necessity of which is shown by the fact that the fire at the Theatre de la Bourse, Brussels, which was burned down but a few days ago, broke out at such an unlikely hour as 3.30 in the morning. Reports should be handed in from time to time to the licensing authorities as to the condition in which the house is found, its mode of management, and as to any alterations that have been made. These reports should in fairness be accessible to the manager whose house is reported upon.

PREVENTION OF PANIC.

In the foregoing papers some few means have been shown that could be adopted to prevent panic in public buildings, yet even if everything advised and much more were done, still some unforeseen circumstance might arise to cause a stampede. Even such a slight thing as the extra pressure of gas through the footlights, causing the flame to appear above the glass flues, as occurred in a London theater last week, caused many to rise from their seats in a state of excitement. In such cases as these the public is alone to blame. Such a thing as death from panic should be unknown; yet in cases of fire it is difficult to make an excited crowd understand that their lives after all are in their own hands, and it is not the fire, but their own pushing, fighting and rushing towards a blocked up exit that will be the cause of their death.

*Keep your seats* is the only safe way to keep your lives. Many cases of panic have been averted through the presence of mind of the actor continuing his part, the manager coming to the footlights and assuring his audience of their safety, or the band striking up a familiar and lively tune.

Those who create panic among themselves should now and then be taught a lesson, and he would be a wise fireman who turned his hose onto them: they would soon return to their senses under such severe treatment. The managers are doing much to help the public, but the public must not forget to help themselves by using common sense.

It is after such disasters as at the Ring Theater, Vienna, and at Exeter, that everybody is alive to the defects in our public places of amusement. It is, however, as necessary in the times when no such excitement exists to be prepared and constantly on the watch as when the public mind is full of apprehension for their safety. During the past month or six weeks many minor accidents have happened, to some of which I have already drawn attention, which might have been as serious in their results as the Ring fire. Architect, manager, the municipal officials and public should all work together with this one object in view — AVOID PANIC.

(*Concluded.*)

## Expression in Form.

THE above is the title of a literary competition by the Chicago Architectural Sketch Club, and the papers are given in the order mentioned by Architects Jenney and Silsbee, Mr. Root, the third member of the Adjudicating Committee, giving a place to but one, the vote of the committee being unanimous in the selection of "Jason" (Peter J. Stewart) as deserving of first place. The essays were limited to nine hundred words and all kept within that limit, the larger proportion being exceedingly brief, judging rightly that much effectiveness is gained in literary work by brevity, using well-composed sentences, as in drawing by few and bold lines. They are as follows, the names of the authors being given as far as known: (The envelopes containing the names of contestants are in the secretary's hands, and the secretary is East.)

SUBMITTED BY "JASON" (PETER J. STEWART).

Matter, in its myriad forms, bears the impress of mind. The elements of these are two: straight forms and curved forms. The one suggests inflexibility, directness of purpose that takes no account of opposition, and strength; the other suggests pliancy and beauty.

Full of vigor a blade of grass rises straight up out of the ground until it is exposed to the dew and heat, when, this necessity provided for, its upper part having less energy falls over, yet not limp, but in an elastic curve.

This illustration probably suggested the phrase founded on Hogarth's line of beauty, "Straight is the line of duty, curved is the line of beauty; do the one, the other will follow."

Curved lines do not necessarily imply weakness, as the case of a fish in nature and a circular column in art prove. The convex form of the fish, from head to tail, presents the least possible resistance to the water, and the circular column accommodates itself to a load and distributes the pressure with less loss of material than any other form.

But, in both instances, the yielding curve is united to strength and solidity.

A hurried glance at the different periods of the world's architecture discovers not only the motives, but something of the character of the people who builded.

The great temples and pyramids of Egypt, the sepulchers (a hillside scooped out to receive them), guarded by colossal statues cut in the unhewn rock, tell of multitudes enslaved and of a ruling despotic race who adored power, power to make and to endure. Worshiping, they developed it in their contest with man and matter, wrestling even with Time, who has not yet overcome them and would not for ages if unassisted by man.

The form of their pyramids is the most lasting that could be devised — straight, severe, immovable.

The subtle intelligence of the Greek impressed itself on his architecture with singular individuality. Knowing that to yield was to avoid friction and decay, he combined that quality and endurance with such skill as to be unapproachable in the grace of the one, while he rivals Egypt in the other.

A Grecian philosopher, baffled in his search for a definition of beauty, said, "Difficult are the beautiful."

The Greeks united strength and pliancy, and all men say, "Beautiful!" As forms they are beautiful, as adapted to their position still more beautiful, and as expressing the emotions of their author's mind, which meaning could probably only be understood by a compeer, they are immortal.

The secret of their art seems to lie in their mastery of detail. Their moldings are based on conic sections. The optical illusion that caused the long straight line of a column or cornice to appear concave, they corrected by another, the entasis, that made it appear straight. Such refinement of detail resulted in work as near perfection as man can accomplish.

The Roman was a man of another spirit. His dominion was over the present, strong and beneficent, but utilitarian. The works that best bespeak his mind are the vast aqueducts, viaducts and bridges, admirable in their fitness to their end. He was the first to use the arch extensively. The strength, solidity and magnitude in his higher efforts are generally more impressive than the detail, which was an adaptation of Grecian work always below the model save perhaps in the temple of Jupiter Stator in Rome, where the Corinthian capital has a free and more easy feeling than its model in Athens.

He had the form, but less of the spirit of high art. His moldings were based on the circle and consequently have less variety of contour and light and shade.

Gothic architects, moved by a devotional spirit, designed for the glorification of God and not of man, like the Greeks. They put their whole mental energy into it and designed noble buildings whose every form is full of symbolical meaning.

The Rennaissance, at first infusing its own buoyant spirit into the lapsed classical forms, seems to have degenerated into a competition to galvanize one style after another with a view to prettiness.

Modern architecture is in an embryo state in this country, and what it will be depends on the development of the character of the people; for as is the man so is his work.

SUBMITTED BY "HENRY." (C. BRYANT SCHAEFER).

In all arts there are two fundamental principles. They are the idea and the means — the means through which the idea finds expression. In architecture form, proportion and color are the mediums for conveying the sentiments of the work in which they are incorporated. While the medium is less essential than the soul of the work, they both require the same studied attention. There may be more than one way of expressing the same idea, but different emotions cannot be expressed in the same manner.

Take a leaf with a sharp and pointed outline and another with a rounded shape. Their functions are the same, but the individuality they express is different. This same individuality can be expressed by means of scratches under each leaf. Although nameless they express the same sentiments as the leaves. That there is little or no sympathy between one leaf and the scratch under another leaf is self-evident. And this will also prove that there is nothing, however insignificant, that does not have the property of some thought or idea. As every form expresses something, it must follow that not only can disagreeable sentiments be expressed, but that a bad design, in the poor association and expression of its ideas, will for all time stand as a monument to the unworthy and poorly handled thoughts of the designer. And a designer creates as he thinks. His own individuality unconsciously becomes incorporated in his work Indeed this cannot be otherwise, for no sentiment can be well expressed that has not been first experienced. The beauties we admire in Greek forms are the expression of Greek character. When the poetry of their earlier religion became debased by the adoption of Asiatic superstitions the architecture of Greece entered upon its decline. When the great moral impulse of the middle ages passed away, Gothic architecture fell apart.

Sentiment in art is the expression of a desire. To appropriate the architectural forms of the past with their feelings in which we no longer sympathize, is like borrowing a mask to hold before a mind of emptiness.

The first duty of an architectural student is to study the external appearance of bodies, store the mind with shapes, forms and angles and learn the manner of arrangement, the harmonious disposition of parts and the pertinent combining of particular things. This is done by acquiring a knowledge of past creations with their causes and results and a clear perception of modern requirements and the possibilities of materials. Associated with this work should be the cultivation of the expression or artistic sensibilities. This can not only be done by a study of the beautiful in architecture, but by practice in all the arts. Sketching from nature, music, poetry, all will broaden and strengthen the mind.

Let us look at the means of expression a little more closely, and study an example. While the form should express some sentiment, it must still be consistent within itself; the laws of structural necessity and utility must not be violated. A hollow globe with a hole in its upper surface might be used for a vase, but it would be inappropriate and inexpressive. It would have nothing to show its intended use, neither would it show any of the expected conveniences necessary to create a sympathy between this form and the idea it should express. That this thing was made to hold something and to hold it conveniently the form must show. When the designer has accomplished this, he will find he has a body, a base for its support and a rim to guard the opening; perhaps also handles by which to carry it. A little too much attention to one or the other of these features, a little neglect of any of them will spoil, because in the first instance members are incorporated that are excessive; in the second they are insufficient. The bulk or mass should determine the character of each little embellishment. Classic form should be supported by classic detail and Gothic by Gothic, not because it is a decree of fashion, but because it is a law of nature. The full curved molding will always express its luxury, the attenuated form its severity. Although it is disastrous to place contrary emotions on an equal footing in a design, yet it is often necessary and right to use them as accessories.

While working on the structure of his design, the artist will have solved this question: What idea should this vase express? Is it made to contain a burden and to help in a work of toil? Does the broad and open mouth suggest the holding of a useful and freely handled liquid, or does the narrow neck guard a contents of precious substance? It may be a vase for a park in which to grow flowers and foliage, or it may be the dainty ornament on an exquisite's table supporting in its slender form a single rose. The contents may be held forth lavishly, or they may be sealed up only to be acquired by the spilling forth of that which is within, like joy that holds out a hand to everyone, or like long hidden sorrow cast forth again beyond restraint. This vase may hold tears — tears, once wept, never to be returned to the fountain; or there may be ashes within the urn, treasured like memories and becoming more dear with advancing time; it may guard an offering of repentance, of hope, of love, despair or anguish set upon an altar among rising incense. Can you master the forms that express all this as the Greeks have done?

SUBMITTED BY "PESSIMIST, JR."

Many volumes of our municipal libraries contain exhaustive discourses on this subject, and not a few of the architects have rare old books in which the "expression in form" of architecture in ancient and middle ages is elaborated to such a degree that the average draftsman would rather work regular hours on Saturdays than worry through the heavy, not to mention unnecessary grammatical expressions of the author, a very good authority, but of some forgotten era. Granted that there is enough of that in stock to meet all demands, I will air my views on the age of steel.

After a recapitulation of recent publications, together with what I have observed in execution, I am pained to acknowledge that the object of some architects has been to frustrate and eliminate any information in the architecture of the exterior that would lead to the discovery of the purpose for which the building or object was intended and erected.

It is possible for an architect to express in the general contour, assemblage of parts and detail, distribution of ornament, if any, in a dwelling, stables, etc., a cathedral, parish and rectory, or chapel, club house, theater, railway station, refectory, lighthouse, warehouse, municipal and state buildings, schools, academies and colleges, and the infinite number of subjects pertaining to his profession that are conducive to shelter and recreation for man and beast, by his knowledge of architecture and ability to construct an edifice which, when completed, will be a silent expression of its intended destination.

This can only be accomplished when each subject is separate and apart from others.

To include an office building, hotel, theater, stores, etc., under one roof, has recently been attempted in different cities, but these structures are more to be considered the feat of engineering and construction, with the architecture applied to cover up the steel frame work.

In striving to please such fastidious requirements as these the architect would naturally incorporate in his design for the exterior a very pronounced feeling of dignity and repose, which would be in keeping with the theater and hotel, but would be almost too severe a treatment for the portion designated for office purposes, as less wall space and more light and air are demanded.

We are surrounded by the most successful office buildings in the world, and from the emphasis of the inviting entrances, projecting bays, large openings and piers, though large enough—thanks to our engineers—are invariably out of proportion to the size of the building or openings. These are requirements necessitated by the limit and price of land, and architects have unanimously suggested the sky? Churches, theological clubs and places for worship can be executed to express their destination in legitimate styles of architecture so forcibly on the laity, that the man with the hat and the heathen Chinee are the first impression.

But recent productions show too plainly a tendency to perversion in ecclesiastical architecture, the source of which can be traced direct to the designer, in making the first studies from a railway station far projecting timber roof, with masonry walls one story high, heavy buttresses; this makes a very picturesque drawing, but how incongruous.

Can there be anything pleasanter in the line of an architect's duties than designing a home that would express at a glance the

purpose for which it was constructed? Considering the interesting and instructive features, I think not; but some of our most expensive homes are so lonely that husbands prefer the clubs to their dismal aspect.

The horse and cow are proverbially of a man's household, but I see no good reason for confounding antique customs with your modern houses simply to be in harmony with the finish and furniture. In this case the house and barn are under one roof, the entrance to both often through the basement of the house but sometimes through an improvised alley. Windows invariably high up, narrow and short, "just enough of an opening to make a dark line," says the designing villain. To the uninitiated in the arts, the destiny of this structure would be an asylum for the blind.

There is consolation in the fact that the honest architect is not guilty of such abortions, and that it is confined to a few who are striving to be original without regard to legitimate styles.

In the cities where ground is worth several thousand dollars per front foot, a building is designed and planned to return a certain per centum on the investment in rents. The architect calls into service the "little I beam," iron column, and fireproof tile, and usually the expectations of the owners are fully appreciated. Usually a large and imposing entrance is provided to the elevators and stairs, and this is the mark of distinction between a commercial office building and a factory. From outward appearance the signs on the window-glass of the former would express its destination perhaps better than the form.

While thus deliberating I have confined myself to a man's home, his place of business and his church, and have arrived at the conclusion that it is in direct variance with political economy to confine oneself strictly to the laws of architecture for selfish reasons, when our client has a large sum of money at stake (in mercantile buildings), and I will stick to this when my shingle fans the breezes, damme if I don't.

SUBMITTED BY "BRETHREN, LET US HOPE."

Is expression in form a necessity in good architecture; or, should the general design of a building express the relation it bears to the work it accomplishes? This has already been discussed by men, and able men, in the architectural profession, as well as in many others in which form holds, or is supposed to hold, a prominent place in regard to its artistic worth — some of these members of the architectural profession holding that it is not necessary for a building to express what goes on inside its walls, to be architecturally good — that what good building requires is either picturesqueness or dignity; while others argue all good work should express its *use* at sight; but beyond this use it would be impossible, in many cases, to carry expression unless the picturesqueness or dignity of the design were sacrificed. Take for example "the home of an artist by the sea." The home of a man of taste and refinement; *one* — how scarce they are — who knows what is good and what is bad, who finds pleasure in studying the good, trying to overlook the bad; for such a man there should be little doubt in the mind of his architect what kind of a house would please him best, and what would express *to the stranger*, as near as possible, the occupation of its inmate.

But again, suppose the house was to be built for a man who had no refinement or taste, had been used to associate with the lower class of people, but had, by the sudden death of a rich relative in the "old country," become possessor of a fortune and straightway decided to build him a house; would an architect then try to build in keeping with the nature of his client? We would see in such a case a building, more than likely, of large dimensions, the man wanting to show the size of his pocketbook, in which no thought had been taken to produce good lines and a general feeling of seclusion and refinement which would appeal to the artistic qualities of a more sensitive nature than his. This course would not only hurt the architect in charge of his plans, but the owner would remain in the same state or position he occupied before, where if he built picturesquely, or, perhaps, still better in his case, with dignity of form, even if he did not like it himself at first, he would naturally become educated up to the artistic standard laid down in his "lodgings." Supposing that we have now proved that expression in form should not be sought after when it would in any way spoil the composition outside of the use to which the building is to be subjected. Supposing this to be true, can we prove that the former is correct and necessary to all good building, architecturally considered — that is, is expression in form necessary?

Let us first ask ourselves, is good planning necessary to the artistically complete *building?* not parts of the building, but the whole structure; the façade of a house may be very beautiful, but it is only a part. I once heard quite a lengthy discussion on that topic, and although it is an exceedingly hard thing to prove, I think every member of that party who discussed it finally came to the conclusion that it was necessary; that if a man saw a good piece of exterior work and then was shown through the interior, if it turned out bad he could not get over a feeling of what might have been and a lowering in his mind of the *general* worth of the building; although the interior had nothing to do with the exterior, he could not get over the feeling that a man who could not do better interior work than that could not possibly be perfect on exterior work—although before seeing the plan he thought the façade, which was but a part of the building, perfect.

Now, whether the plan of a building is good or not must be decided by whether it fulfills the duties required of it in the best manner, and to the best advantage that could be gotten out of the situation. This a professional man is able to tell and admire, if it happens to be good, at first glance, and the average client is not far behind him, and equally ready, in his absence, if not in his presence, to point out the bad. In such a case would not the perfect plan always lend form to the building?

This expression would, however, be most readily interpreted by those who inhabited the same land or lived in the same locality, as different climates and different pursuits in life would of necessity require different arrangement and style of building. If such a phenomenal thing should happen that all men would work for expression in form, would it not also bring about a great change for the better in one detail? The Greek had but one form for his temple, which he carried to perfection, but what a chance he had for the display of refined and elegant detail, which he evidently considered as important as the massing of his building. How many buildings have we here which would stand the criticisms put to his work?

SUBMITTED BY "X. Y. Z."

Expression in form, I think, is the most important feature of any object, design or illustration, no matter what it may be; if the form of any given object, or the design or illustration of the same is not good and true to nature, or if it be disfigured in any way, it is certainly not an object of beauty or admiration to the observer, if not one of disgust or contempt.

In architecture, I think, form is the principal feature, especially on the exterior of a building which is to be erected in a large city, where it is almost impossible to preserve color any length of time. Color has no doubt a great deal to do with its appearance, but not nearly so much as form. A model of any building showing all its features in detail, I think, is the best illustration that can be given of the same, because there is no chance to make mistakes in judging or criticising it, as the whole is shown just as it will be when it is finished.

We also judge the appearance of the most if not all things by their shape and form, a great deal more than we do by their color.

SUBMITTED BY "Z., JR."

The feelings of a talented and cultivated mind, such as noted artists possess, are expressed in the style or form of their work, and if presented to us in proper form we experience those same feelings as did the artist or composer when he designed or composed his work, that we now hear orbe hold.

This work may be expressed in various forms, such as voice, music, architecture, etc. It may also be rendered in proper and improper style or form, producing either, or both pleasant and unpleasant effects. The pleasing will be full of deep feeling, refined, superb in detail, properly delicate, and the proper expression in its proper place; while others seem so cold and stiff, without a touch of feeling, and may sometimes be termed vulgar. Then we have the different expressions in the church, dwelling, business block, armory, jail, monument, tomb, etc. Each one confers upon us some feeling, either of comfort, strength, noble deeds, sorry, etc. To introduce these feelings into its proper structure is a study of "Expression in Form."

THE ADJUDICATING COMMITTEE'S REPORT.

The Adjudicating Committee, at the meeting, October 7, submitted the following letters as their report and criticism upon the competition:

*Mr. W. R. Gibb, Secretary:*

I note your request that the reports be signed by all three judges. Whenever heretofore such has not been the case, it was due to the absence of one of them from the city for a period beyond the time when it was thought necessary to return the designs.

In this case — essay, "Expression in Form" — each of the judges will make his own individual report, which each will forward to you.

We are not sure, however, that this is as you wish it. Perhaps you prefer that the three judges should all agree upon one report. If so, kindly return the several reports to Mr. Root, and we will agree upon a single report.

I have the honor to present the following: I am in receipt of six essays, signed: "Jason," "Henry," "Pessimist, Jr.," "Brethren, Let us Hope," "X. Y. Z.," "Z., Jr."

I place "Jason" first. His essay shows a knowledge of the subject, is well treated and is what I judge that those giving the subject intended. His illustrations are well selected and are entirely architectural.

For the second place I select "Henry." He has treated the subject somewhat differently, particularly in his illustrations. His ideas are good and well expressed.

For the third place I select "Pessimist, Jr." He has decided opinions that I think are usually correct, and he certainly has a strong expression of how he will treat the case when he is in practice for himself.

I place "Brethren, Let Us Hope," as fourth in the list. The essay shows thought and correct ideas.

"X. Y. Z." and "Z., Jr.," I place last, not because they modestly chose the last letters of the alphabet for their motto, nor because they are much the shortest of the essays, but because they have given less study to the subject than the others. The ideas are, however, correct, and if they had but devoted more time to the subject they might have taken a higher place in the list.

Respectfully submitted,

W. L. B. Jenney.

I concur in above report. J. L. Silsbee.

*Mr. W. R. Gibb, Secretary:*

After reading over the various papers submitted in competition for the Sketch Club, and written upon the general question of "Expression in Form," I beg herewith to submit to you my criticisms upon them.

Beginning with "Pessimist, Jr." It seems to me that he has viewed the subject in too general a way. The questions raised by him relate generally to architecture in its various expressions, but is not confined simply to matters of form, reference being had to general

massing and light and shade, whether involved in fenestration or in other matters,

As I understand it, "Expression in Form" is intended to mean form as opposed to color or to light and shade, as all art expression has these three elements, whether that art be music or poetry, painting or architecture. These different elements enter less into some than into other arts, as, for instance, the matter of color in sculpture, etc. What I conceive, therefore, to be intended was the differentiation of form in architecture from the other elements of its complete expression. For this reason I do not conceive that "Pessimist, Jr." has realized the essence of the question, although his article exhibits considerable knowledge and discernment, and a latent capacity for a certain power of caustic expression.

*Second.* "Brethren, Let Us Hope," places great stress on the expressiveness of a design of the functions of the building, and even of the character of its occupants, and then proceeds to question if a good design may be based upon a bad plan. Here again, it seems to me, the subject is debated in too general a manner and without placing sufficient accent upon "form," pure and simple. The questions he raises are very pertinent and of great importance, and if frankly accepted would lead to a very much more wholesome condition than architecture at present generally obtains. It is certainly true that before architecture can ever attain vital expression, the building must be viewed by the architect as an organism, having within its elements as vital functions, as well defined and as consistent with themselves as any of the organisms created by nature.

The crime in design of inconsistency within itself is great, primarily because of this fact: that it is a sin against the nature of things, which can never be in any sense successful. Architectural styles, so-called, exist and are recognized solely to the extent in which they move and are manifested by natural laws, or in violating these become monstrosities. These architectural sins against nature have never been able to maintain themselves longer than the short and worthless life of their inventors. The primary study of nature, therefore, will be frequently found advantageous over the mere study of architectural tradition unillumined by such study.

*Third.* "Jason" confines himself to "form," as I understand it, much more closely; and his paper I think you will find suggestive and instructive. His observations are in the main very pertinent, and to this paper I am inclined to give first place. It seems to me that if "Jason" will read the discourses of Violet le Duc upon the development of Gothic architecture, the very lucid chapters given to this subject will convince him that Gothic architecture was not evolved solely in a purely devotional spirit. This conception of Gothic architecture has done much to destroy its vital study by the moderns.

*Fourth.* "Z." As stated above, I do not conceive that "form" is intended to be discussed in its widest aspects, especially if the word be used as signifying the various avenues through which arts like music, poetry, etc., manifest themselves. Style and form seem to be somewhat confused in this paper, and this is a great mistake. Form is the underlying motive of intellectual expression, which lies at the foundation of all architectural styles; and one phase of form may underlie many architectural styles, as, whether lines be straight or curved, whether moldings be conic sections or be described with a compass, etc.

As noted above, a man studying all architectural styles in general should constantly bear in mind this fundamental element of form, out of which they have grown, which exists outside of them, and would be as vitally existent if these architectural styles had never been developed. To observe in architectural styles the underlying forms, coupled with the social, religious, mercantile and military conditions out of which they grew, is to comprehend them. Observing them merely as set down in the books is to have no understanding of them. There is a small work on architecture, written by Mr. Garbett, in which occurs a very suggestive and delightful discussion of questions of form as related to architecture and other arts, which it would be well to read.

*Fifth.* "X. Y. Z." is right in saying that architecture depends for successful expression more upon form than upon any other one element; but the great, highly emotional and elemental value of color must not be forgotten. If any one of you has chanced to see the ruins of the Acropolis, or has seen Mr. Church's magnificent painting of them, or has even been fortunate enough to see an old piece of Pentallic marble, he will bear witness to the fact that much of the charm of the Parthenon must have come from its wonderfully luminous and delicate color. In more familiar cases, one has only to recall the glow of light falling upon some old red sandstone cliff to understand that under conditions favorable to its expression color in architecture may be as potent as a chord of music.

"X. Y. Z.'s" observations on models of buildings are in the main just, although it must be borne in mind that the model itself fails to convey the sense of scale, except as relative between various parts, and can in the nature of the case make no allowance for the effects of fore-shortening, which is so great in urban architecture.

*Sixth.* "Henry" makes very good use of the Greek vase, which has frequently served as text in this direction, and the study of which can never be carried too far. In the cultivation of sensitiveness to form, the Greek vase stands only second to the human figure. Undoubtedly the Greek vase obtained its form from close observation of the human figure, as did all Greek work of beauty. Many of its lines can be comprehended only as one recognizes their analogue in certain expressions of flexure, of roundness or of muscular development in the nude figure. The vase possesses the rare advantage that it is the first art product derived from the figure, and yet at the same time applied to practical use, so that in it are united in very close relationship two operations of the native human mind; first, observation developing into the recognition of beauty, and second, the intellectual process by which means are adapted to practical ends.

I would like to call attention at this point to two other conditions which have, or should have, strong influence upon the character of forms employed in architecture. One is involved in the process of manufacture; the other is the character of material. In a sense these two conditions are one. Perhaps I may illustrate this best in the familiar case of cast as against wrought iron. Anyone who has watched an artist working in metals will know that at a certain point, by one blow of the hammer at the right instant, a bar or a leaf will have attained to a certain crispness of expression, the destruction of which demands, on the part of the worker, considerable effort. Beyond a point where this crispness is attained, all pleasure in the work must have ceased, and the rest of the operation is merely labor, and labor expended to wrong ends. It has no analogue in work produced by casting where the sole successful result is secured in reproducing the original model from which the casting has grown. Generally speaking, the statement will hold that if a given ornament or form is good in one material to the extent of being best, it will be bad in another material to the extent of being less good. Some analogues may hold through several materials, as for instance, modeling in papier-maché may have something in sympathy with casting in metal, or a carving in clay may have something in touch with carving in wood; but even here the superior tenuity of wood fiber will indicate certain advantages of expression denied to clay, and the superior toughness of papier-maché and the greater hardness of iron would suggest certain typical forms for each here. No one may legitimately use through all materials certain specific forms, although underlying all of these forms as applied to different materials may be certain elemental conditions, as the piquant or vigorous sentiment evoked by straight lines and acute angles or straight lines and right or obtuse angles. And again, when by the use of certain circular or other curved forms sentiments of fluency and grace or of large openness and nobility of expression may be produced.

In an informal criticism of this sort, nothing but a mere suggestion can be made, but I think you will all find in making your own designs, which I trust you will always do, that there lies at the bottom of this whole subject a wealth of suggestiveness which, put into actual practice, cannot fail to be of great value.

## A Model Building Law.

At the recent convention of the National Association of Fire Engineers, at Detroit, an essay upon the general subject of fire prevention, under a number of heads, was read by Mr. Henry A. Goetz, of New Albany, Indiana. Sections B, C and D of Mr. Goetz's paper are given as directly bearing upon the proposed draft of a building law that should tend to limit the annual destruction by fires. They are as follows:

(B.) *Which is the best economy, to continue building as now done, and trust to the fire department: or put up better buildings, that will not destroy each other, but will burn out individually?*

The general public is not aware that eleven fires alone destroyed over 30 millions during 1889. Just think of it, eleven fires costing on an average near 3 millions each. We destroy over 110 millions worth of property each year; we spend near 40 millions for managing a system of insurance tax; 30 millions are needed for the fire departments, our whole fire tax being near 190 millions. Estimating our population at 64 millions this fire tax amounts to $3 per head for every man, woman and child in the United States. One half of this sum at least is the price we are paying for ignorance, carelessness and crime; the other half we cannot help, for fires have occurred for ages and will continue to occur, notwithstanding all precautions to prevent them; but it is a lamentable fact that our people have grown more careless than those of any other nation, and that the means for preventing fires have not by any means kept pace with those for its extinguishment. Take up the report of a representative department, that of New York, and in 1866 the ratio of fires to buildings was fig. 1 to 80, and in 1889 it has risen by uneven steps to fig. 1 to 40. While the number of buildings increased 80 per cent and the population 120 per cent the outbreaks of fire increased in number 250 per cent. The Insurance Commissioner of Massachusetts, in his report, estimates that full 90 per cent of all fires were preventable. These figures indicate very plainly that it is better buildings and increased precautions we need rather than improved apparatus or additional firemen.

At a public meeting in Boston, Inspector Damrell said: The subject of prevention supersedes that of extinguishment, and that we must build so as to confine the fires in the places where they started; if you wish to avert conflagrations separate the risks by fire walls so that fires can be confined. Prevent the erection of a building which when a fire starts in it will not only destroy itself, but lay waste the property of its neighbors.

At the same meeting the fire commissioners expressed the opinion that it was not additions to the fire department or improved apparatus that was wanted, so much as better buildings that were able to resist fire. In fact it is now being accepted as law by the insurance experts and those who are intimately concerned, that it is only by the most careful inspection and improved methods of building that we can ever hope to reduce the fire waste of this country.

The walls of all warehouses, stores, factories and buildings intended to contain merchandise, machinery or humanity should be of the most substantial construction. The joists, girders, posts and interior framework should be so constructed that the entire contents might be burned and destroyed without danger to the inclosing walls. If the architect could be prevailed upon to design his building so it could safely cremate its own contents, then it would be impossible for any fire to spread to any serious extent, and the conflagration

hazard could be wiped out of existence. The eleven fires of last year would have been impossible and immeasurably less would have been the danger to life and property.

When it is borne in mind that falling walls are of frequent occurrence and that when one building gives way the one standing next to it usually falls also, and when it is considered that this flimsy method of construction as now practiced furnishes all the most favorable conditions for a conflagration, the wonder is that each city is not in turn destroyed block for block.

It is a high tribute to the efficiency of the American firemen that conflagrations are not of more frequent occurrence, and with no small amount of pride can we assert that the American firemen are head and shoulders above those of any other nation, and while the firemen are doing all that it is possible to do, nevertheless it is much the best economy to prevent fires rather than trust to our ability to extinguish them.

(C.) *Should firemen take an active part in urging that better methods of construction be adopted? And in what way can they do this best? Is it policy for the National Association to undertake to frame a model building law?*

For the last few years the loss of life at fires averaged near five hundred yearly, and we can call to mind many brave and fearless firemen who are among that number. Hardly had our last convention closed, when Major Hughes was called home by telegram to mourn the loss of five men who were buried under falling walls. Following soon after this came Philadelphia with one dead and several injured; at Lynn another lost his life; then the big fire at Boston took away four at one time. This list could be kept up indefinitely, but we will close with the most fearful of all, Indianapolis, twelve being killed at once and many others injured.

It is certainly a sad commentary on our methods of building to know that the collapse of a single post, or the falling of a few joists should cause the whole building to fall. Should we, then, as firemen, stand back and say nothing? Is it not our duty to cry out and call upon our government, both state and national, to correct these evils in building? Take up the building ordinances of all the larger cities, and you will find no two of them alike; uniformity is a term unknown. Examine more closely and you will discover many paragraphs to be unnecessary or so ambiguous as to be misunderstood.

It is a strange commentary on the intelligence of this great nation that not a single state in the Union has a comprehensive building law, classified to meet the varying wants of its different cities. Not a single city in this country has an ordinance that can be considered perfect, or nearly so. That of Louisville, just passed, is said by architects and builders to be impracticable, even using names and terms unknown to the trade. The mayor of Boston has just appointed a committee for the purpose of revising an admittedly bad and patched-up ordinance. In New York state a bill was recently introduced at Albany providing for the appointment of a commission of three experts to draft suitable laws for the construction of buildings in the state. This bill fell through, possibly because the average statesman did not appreciate its importance. New York City has had a commission at work for months revising and correcting the law, and intended to have the amendment passed by the last legislature, but the underwriters found some room for improvement, and succeeded in delaying its passage until next winter. St. Paul, Minneapolis, Baltimore, Philadelphia and Memphis are at work seeking to improve their laws; all this work showing conclusively, and admitting, the defects now existing.

This subject of improved methods of building should receive our most earnest and careful deliberation, for it concerns the financial welfare of this country, the personal safety of ourselves and the life and property of those who are so unfortunate as to occupy these badly constructed buildings during a fire.

There are other national bodies who should be as deeply interested as ourselves, and we have every reason to believe they are, namely, the American Institute of Architects, the National Association of Builders, the National Board of Underwriters, and the National Association of Building Inspectors. It does not seem improper, therefore, for this association to ask the coöperation of the national bodies mentioned for the purpose of framing a "model building ordinance." Such a model, framed and promulgated under their combined coöperation, would be eagerly adopted by all cities, and would have a wonderful effect in improving our present methods of building.

This association should be the first to take some action in the matter. Nothing we could do would be more commendable. Nothing we could do would be of such importance. Nothing we could do would be considered a greater blessing. Nothing we could do would bring us into more favorable prominence than to be the prime movers toward getting a uniform and model building ordinance framed and adopted.

(D.) *Will it cause the public to adopt better methods of building if the chiefs, in making their reports, would adopt the plan of reporting, in addition to the total loss, also the probable loss that would have occurred if the building in which the fire originated had been built with adequate fire walls or in a proper manner?*

The people generally seem to think that a great fire or conflagration is an act of God, and find consolation in insurance, forgetting that insurance companies merely distribute the burden on the multitude with about forty per cent added to pay dividends and expenses. The people generally are not aware that the greater the fire waste the greater the tax on the people. Insurance is now considered a legitimate and necessary expense, and anyone is counted as negligent indeed who meets with a loss by fire and is not insured against such a loss. Insurance, therefore, is a tax, amounting at the present time to near one per cent on all our taxables. A reduction of this tax is an important matter and lies wholly in the hands of the people, and can be brought about only by greater care in preventing fire and by better methods of building. The mutual insurance companies have demonstrated beyond a doubt that it pays to put up better buildings and protective apparatus. From actual results we find that the rate on a textile mill was formerly two and one-half per cent, while the rate last year was only one-fourth per cent. The president of a prominent stock company asserts that his company would make good money at one-third the present rates if fires could be confined in the buildings in which they originated.

Losses by fire from interior causes seem unpreventable, but those from exposure, that is where fire extends to adjoining property, can be prevented by the erection of better buildings, having substantial fire walls.

The *Chronicle* fire tables show a loss from exposure during 1889, amounting to $50,000,000, the total loss from all causes being $125,000,000; sixty per cent, therefore, representing the loss from all causes and forty per cent that from exposure alone.

After any great fire there is usually considerable criticism floating in the air condemning the management at a fire, and the firemen generally get the blame if anyone is hurt by falling walls. Did you ever hear anyone ask or inquire during a fire about the details of construction, and how it might be improved? Did anyone ask for the name of the architect, the builder and the owner? Is the architect censured for permitting his judgment as to safety to be overcome by the economical ideas of the owner? Is the builder ever called to account or brought before a jury for putting up such a flimsy death-trap? Is the owner ever summoned before a judge to answer for the damage caused to adjacent property through his negligence, or to answer for the victims that were burned and scorched? No; none of these are at fault. It is the chief; it is the firemen that get all the blame. I need only refer to the newspapers for evidence. This way of criticising matters should be changed, and it can be done.

One chief in his report says, "Had the walls of the building been sufficiently strong the fire would have been confined to that building alone, and the loss would not have been more than one-third what it really was." Another says, "If the walls would have remained standing the loss would have been very much less." Another says, "The walls fell early, exposing much property that lay next to it." Now this is entirely too lenient with the owner, and much stronger language should have been used, giving the figures of the total loss and also of the preventable one. We have become so accustomed to walls falling that we take it as a matter of course and not to be helped. This habit our builders have of making thin party walls do double service and of propping up these buildings against each other, will not do. Compel owners to build so that a structure will stand alone should those adjacent be removed. Compel builders to put up a building so that the entire interior of the same could burn out without damage to the exterior walls.

Draw out these facts especially in your reports, with a view of educating and instructing the people, and there will certainly be a public opinion aroused that will correct these evils and make it a crime against the safety of the public for anyone to build these thin, weak and unsafe party walls. Methods of anchoring should be corrected, for at the present if the joist fall the anchors cannot free themselves and therefore the wall is pulled down. You must explain in your reports what made the walls fall and insist on some method of anchoring joist being used so that falling joist shall free their anchorage and leave the walls standing, remembering all the while that nothing in existence can resist a fire so well or so long as a standing brick wall.

## Ohio Chapter American Institute of Architects.




THE reorganization of the state association into a Chapter of the Institute has been accomplished, with fifty-two members in good standing. The examination of new candidates is the same as that prescribed by the Institute constitution.

The following circular letter has been issued to each member:

OHIO CHAPTER AMERICAN INSTITUTE OF ARCHITECTS.

Office of the Secretary,
Akron, Ohio, October 12, 1890.

Dear Sir,—I take pleasure in announcing that the result of our recent ballot has been unanimous in favor of reorganization as the Ohio Chapter of the American Institute of Architects.

Application has been made for a charter, which we expect to receive at or prior to the next annual convention of the American Institute of Architects, which will be held in Washington, District of Columbia, on Wednesday, October 22.

As it is very important that action should be taken at the earliest possible opportunity to ratify the result of this ballot, effect reorganization and attend to business pertaining thereto, it is the desire of the Executive Committee to hold our initial Chapter meeting while at Washington, thus avoiding the necessity of calling a special meeting for this purpose, and it is hoped that there will be a large attendance of the Ohio Chapter at the convention.

It has been suggested that Ohio members stop at the same hotel, if convenient, while in attendance at said convention. Therefore, if members will at once notify the secretary of their intention to attend, the number of their party, whether accompanied by ladies or not, and the accommodations desired, arrangements will be made for special rates at some first-class hotel, and due notice given.

The Executive Committee desires to inform all members that, according to the revised constitution, the official year of the Chapter will begin and end with January 1, and that the fiscal year will begin and end with same date.

Accompanying this are copies of the revised constitution and by-laws, list of members, blank applications for membership, schedules, etc., and it is hoped that each member will endeavor to increase our numbers by securing the application of some professional brother in honorable practice yet without the pale of our influence.

George W. Kramer, Secretary.

## Institute Convention at Washington.

IN advance of the regular programme of proceedings of the coming annual convention of the American Institute of Architects, at Washington, the secretary has issued a circular letter of information mainly directed toward securing a full attendance of members, and through this object placing at their command reduced railroad rates and special cars. The circular is as follows :

AMERICAN INSTITUTE OF ARCHITECTS.

OFFICE OF THE SECRETARY,
THE ROOKERY, CHICAGO, October 10, 1890.

DEAR SIR,—The convention of the American Institute of Architects to be held in Washington, Wednesday, October 22, should be of such general interest to the profession as to call out a full attendance of Fellows of the Institute.

Arrangements have been made with the New England, Central, Southern and Western Passenger Associations, representing the Trunk lines in the United States, by which members attending the convention are entitled to a one and one-third rate.

A first-class ticket should be purchased through to Washington, the purchaser being particular to state to the ticket agent that he will attend the Institute convention, and asking for a certificate. This certificate will be signed by the secretary of the association at the convention, and upon its presentation to the ticket agent a return ticket will be issued at one-third fare. If a through ticket cannot be purchased to Washington, a ticket should be purchased to the most convenient point where such can be obtained, and a through ticket and certificate secured there.

Architects west and south of Cincinnati will observe the following :

In order that members may travel in company, the roads mentioned in the following time table have been selected :

TRAIN SCHEDULE.

Leave Minneapolis....C. M. & St. P.....6:10 P. M., Monday, October 20.
Leave St. Paul.....C. M. & St. P.....6:10 P. M., Monday, October 20.
Arrive Chicago.....C. M. & St. P.....7:00 A. M., Tuesday, October 21.

Leave Omaha..... C. B. & Q.....4:30 P. M., Monday, October 20.
Arrive Chicago.....C. B. & Q.....8:00 A. M., Tuesday, October 21.

Leave Denver.....C. B. & Q.....9:30 P. M., Sunday, October 19.
Arrive Chicago.....C. B. & Q.....8:00 A. M., Tuesday, October 21.

Leave Denver.....Santa Fé.....10:05 P. M., Sunday, October 19.
Arrive Chicago.....Santa Fé.....7:25 A. M., Tuesday, October 21.

Leave Denver, .....U. P.....8:30 P. M., Sunday, October 19.
Arrive St. Louis.....Mo. Pac.....6:40 A. M., Tuesday, October 21.

Leave Chicago.....“Big Four”.....9:10 A. M. Tuesday, October 21.
Arrive Cincinnati.....“Big Four”.....6:14 P. M., Tuesday, October 21.
Leave Cincinnati.....C. & O.....6:30 P. M., Tuesday, October 21.
Arrive Washington.. .C. & O.....2:35 P. M., Wednesday, October 22.

Leave St. Louis.....“Big Four”.....8:05 A. M., Tuesday, October 21.
Arrive Cincinnati. ....“Big Four”.....6:14 P. M., Tuesday, October 21.

Connects with Chicago train at Indianapolis.

Leave Peoria, Ill.....“Big Four”.....7:05 A. M., Tuesday, October 21.
Arrive Cincinnati.....“Big Four”.....6:14 P. M., Tuesday, October 21.

Connects with Chicago and St. Louis train at Indianapolis.

Leave Chicago.....B. & O.....10:10 A. M. and 2:55 P. M.
Arrive Washington....B. & O.....10:38 A. M. and 3:03 P. M.

By taking these roads either from the terminals mentioned or the intermediate points, where warranted by the numbers, special cars will be provided eastward and returning. Notification of an intention to attend the convention should be immediately forwarded to the secretary.

As previously stated, the Arlington House has been selected as general headquarters. Because of the general crowded condition of the city at this time, members are requested to send application to that hotel for rooms in advance.

The board of directors will hold a meeting on Tuesday, October 21, at which matters of importance, including the election of Fellows, etc., will be transacted.

All reports of committees and Chapters, and notice of all papers to be read or documents to be presented, should be in the hands of the secretary a week before the convention.

An order of exercises will be issued. JOHN W. ROOT, Secretary A. I. A

The plan suggested by the time table is to secure, as far as possible, the special privilege of members traveling together. The St. Paul road from the northwest will issue tickets to Chicago, and the time of arrival will give ample time to change cars to the “Big Four.” From Chicago, two roads have been selected. The Baltimore & Ohio will take those who wish to go direct in the shortest possible time. Those who wish to enjoy the ride and see some of the most superb scenery this country affords, will take the “Big Four” via Cincinnati. At that city transfer will be made to the Chesapeake & Ohio; arriving at St. Louis, members from the West will also take the “Big Four” to Cincinnati, and those south of that city will also make it the objective point. If the time table and circular is carefully studied and carried out, a special train of many cars can carry western members to and from the convention and prove a social feature that cannot be equaled. On the return trip, it is hinted that a stop at Old Point Comfort and the Natural Bridge is a probability. The secretary should, as far as possible, be notified of intention to be present and the route preferred.

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## A Trades Union Demand on English Architects.

RECENTLY the Council of the Royal Institute of British Architects received deputations from the London United Building Trades Committee, and the London Trades Council, respecting the question of sub-contracting in the building trades. The particular purpose of the interview was to urge upon architects, through their representative body, the desirability of inserting in their conditions of contract the three following stipulations, viz: (1) That the contractor shall not be allowed to sub-let any portion of the work; (2) that all labor employed by the contractor shall be of the best quality; and (3) that the contractor shall not pay less than the recognized or trade-union rate of wages, and shall observe all recognized rules or customs as to working hours. The results of this interview have been very carefully and critically dealt with by Mr. Edwin T. Hall, in the last issue of the R. I. B. A. *Journal*, and for the benefit of its many readers among the general public who seldom look at purely technical journals, and are still more unlikely to read the transactions of a society like the R. I. B. A., the *British Architect* makes as clear and brief a synopsis, under the head of “Architects and Sub-contracting,” as the importance and technicality of the subject will allow, and which is reproduced because of the similarity of conditions and sentiment among architects of this country.

“The first demand made from the architects by the deputations to the R. I. B. A. Council was that they shall not permit contractors to sub-let any part of their work. Mr. Hall, in his article, analyses this demand very carefully, taking each part of the work which is usually, or sometimes (as the case may be) sub-let, viz: (1) The excavator; (2) bricklayer; (3) mason; (4) slater; (5) carpenter and joiner; (6) engineer and iron founder; (7) plumber; (8) hot water or steam heating; (9) gasfitter; (10) electric lighting; (11) bell-fitter; (12) plasterer; (13) painter; (14) glazier; (15) carver. The reasons why most of this work is sub let, Mr. Hall clearly shows, are by no means entirely those of greed on the part of the chief contractor, nor is he of opinion that the work must necessarily suffer in consequence. The fact of the matter is that this custom has arisen more from the great convenience of the thing than anything else, and the evil of it creeps in where the architect is not sufficiently concerned in the quality of his work, or sufficiently competent to judge what is wanted, to see that only those sub-contractors are employed whose names are a warranty of good materials and workmanship. Almost every architect of any repute whatever specifies by name what firms are to supply such things as fireplaces, mantlepieces, gas or electric light fittings, ornamental plaster work, water-closets, etc. Decorative work, too, is generally sub-let under the architect's special direction, as also the carved work. The matter of masons' work is, in a sense, a more debatable question. It will be remembered that there was a strong protest entered by the London masons against the stone for the Imperial Institute being dressed at the quarries. Mr. Hall's remarks on this point, are, in our opinion, quite conclusive. ‘As architects,’ he says, ‘we can condemn only the inferior craftsman and his workmanship. I believe all the stone for the Spanish Place Church was worked in the country by the quarry-owners. Is it inferior to work done in London by our masons?’ This is really the only question the architect has to consider, especially when he knows for a fact that the country masons who dress the stone are proportionately as well paid as their London brethren. ‘We cannot,’ contends Mr. Hall, ‘accept as reasonable, either that the country qualified mason should be paid the same as the London mason—which would be very unjust to the London mason, who has to pay so much more for everything—or that all the stone used in London should be worked in London, in order to give more work to the London mason at the expense of his country fellow-workmen.’ As to the allegation that for quarry-worked stone inferior material is used, Mr. Hall asks: ‘What are the dry probabilities? Stone before it goes onto the rails is worth a few pence per foot; but delivered on a job in London, it is worth double or treble. To set aside a soft or unsuitable block in the quarry yard means no loss; it will come in for some purpose. To set it aside on a London job means at least the loss of the freight to London, and the carting to and from the building. I fear the temptation would be stronger in the case where there was most to lose. Again, the quarry owner, by his contract, has to satisfy his employer and the architect. Is it more likely he would put work to a bad stone, and pay its freight to London with the risk that the whole would be rejected when it got there, or that he would exercise great discrimination in selecting good stone?’ And does not the question of the waste material got rid of in the dressing process count for something in the cost of freightage in a large contract? Then again as to the case of sub-letting the stone work—labor and material—the same argument applies as in the case of the excavation work. The sub-contractor generally makes a specialty of the work, and provides the extensive plant and facilities required accordingly. Mr. Hall mentions by name, in connection with stonework, Messrs. George Smith & Co., whose ‘facilities for moving and working stone are so much greater than all but the largest contractors, that they can do stonework cheaper than the chief contractors under whom they work, without attempting to cut down wages.’

“So far as we have understood the objections raised against the sub-letting of builders' work, they seem to have been founded rather on trades unionist ideas than a fair knowledge as to whether its abandonment would be likely to improve the quality of such work. Now, for the architect the one important question is that the materials and workmanship put into his building shall be of the quality specified. How far does sub-contracting interfere with the requirements of good building? We are quite of Mr. Hall's opinion that, ‘given an honorable contractor, there is no reason in the nature of things why work done under him should be less well done through sub-contracting than by means of day laborers.’ But that sub-contractors are by no means always honorably dealt with by contractors, and that there is often great delay in the delivery of materials on to a job, and much friction caused by the number of sub-contractors and their workmen, goes without saying. Whilst, therefore, we think with Mr. Hall that the prospect of dispensing with sub-contracting in respect of many trades is practically impossible, yet we are far from considering the system an unmixed blessing. We do not see how architects could with any real advantage to their clients or their work veto the sub-contracting system. Their endeavor, it seems to us, should rather lie in the direction of seeing that the ‘Heads of Conditions,’ issued by the R. I. B. A. for guidance as to the formulating of contracts, are more definitely accepted and carried out. They cover, as Mr. Hall takes care in his article to point out, practically all the evils complained of in sub-contracting; for instance, Clause 4 stipulates that ‘the contractors are not to sub-let the works or any part thereof without the consent in writing of the architect.’ This to all intents and purposes should reduce the evils of sub-contracting to a minimum, providing the architects are in any real sense competent practitioners. Clause 3 provides that ‘all materials and workmanship’ must be ‘the best of their respective kinds’; this settles the question raised

in the second proposition brought forward by the deputations to the R. I. B. A. Council.

"As to the question of inadequate wages and long hours, we cannot accept the trade-union principle that the incompetent artisan shall be paid the same wages as the skilled one. And in the building trades it is of the utmost importance that none but thoroughly competent workmen should undertake skilled labor. If contractors employed none but competent men the rule might apply, but can it be honestly said that such is the case, and if not why should good and inferior work be paid for exactly at the same rate? 'Labor of the best quality,' says Mr. Hall, 'will always command the best wages.' It *ought* to be so, but according to the trades unionists the best is no better in point of pecuniary value than the worst, which is about as absurd an idea as to imagine a handsome four-year-old thoroughbred horse to be of no more value than the aged, broken-down living skeleton about to be slaughtered in the knacker's yard! * * * * *"

## The St. Clair River Tunnel.

THE longest river tunnel in the world, and one of the most daring pieces of engineering ever attempted in this country, was completed at Port Huron, Michigan, August 25. The work engaged over six hundred men for thirteen months, and was built under the supervision of the Canadian Government for the Grand Trunk Railway of Canada. The length of the tunnel, which is twenty feet in diameter, from the beginning of one approach to the end of the opposite, is 28,000 feet, 6,000 of which are wholly underground, with 2,310 feet under the river, 2,390 feet under Michigan land, and 2,160 under Canadian. It is entirely a unique construction, built exclusively of iron, without a stone or brick in it, being simply an iron tube made of plates, 6,000 feet long and 20 feet in diameter, perfectly round and water tight, as dry as a street in summer time, lighted by electric light, ventilated by air engines, and kept at the right temperature with steam pipes.

The plates on the front end are made with an edge, and to the rear end are fastened the hydraulic jacks. Projecting over and fastened to the rim of the rear end is a steel cylinder, called the tail-piece. Inside this tail-piece the rings of the tunnel-lining are riveted together, and as the shield advances the tail-piece is drawn from behind the lining, and against the edge of the last ring the jack works, shoving the machine ahead with a slow but simply irresistible force. A row of twenty-four jacks was used, each one with a pushing capacity of 125 tons. Consequently, when the water was turned on, this monster cylinder plowed slowly into the earth under 3,000 tons pressure, or a weight of 6,000,000 pounds. It was simply irresistible, and cut boulders square in two. Inside this shield twenty-two men worked. The clay was cut with sharp instruments from the front end as far as the edge, and passed back to the mule cars. By this process the men were at all times free from any danger of cave-in. The back end of the shield has air-tight doors, which could be closed on a moment's notice in case water should be struck.

The plates which form the tunnel are of such curvature and length that thirteen of them, with a key-piece, form the 20-foot circle. They are about 18 inches wide, and weigh 1,050 pounds each. The ends and sides of the segments are turned up, each one is bolted to its neighbor, making the tunnel practically one piece. Each ring, when completed, weighs 14,150 pounds, and the 3,800 of them have used 53,770,000 pounds of the best iron known. Those for the Michigan end were made in Detroit, and those for the other side in Canada.

This simple method of plowing into the clay and digging it out, handling it with cars and derricks, as in all excavations, was used until the 2,310-foot section was reached. Here the water began to pour in. This emergency had been anticipated, and compressed air was turned on, a solid brick wall eight feet thick having been built across the tunnel, 2,000 feet from the opening.

Through great tubes four immense engines pumped air into a tank, and thence into the air-tight section of the tunnel until the pressure was twenty pounds to the square inch. It proved to be a deadly process, and three men died in quick succession. The horses drawing the cars died after two days' service. Finally the laborers were put under medical examination, and only one in ten was found who could work under such an unnatural atmosphere, but mules were found to thrive on it. With this pressure the water and quicksand were driven ahead, and the work went on as rapidly as before. Passing through the temporary wall of masonry was an engine-boiler with doors at each end. The mules hauled the cars into this; the door on the inner end was closed; a man on the outside let out the air from boiler and opened the outside door, and the mule and car came out into the natural air.

Occasionally a rift in the clay would be struck, and the water in the big river would boil up like a geyser. If the pressure reached forty-five pounds, the men would drop dead, simply crushed. A man with his hand on a valve watches the gauge constantly and regulates the pressure. When the air is released from the boiler-lock it sounds like the roar of a dozen engines or a gas well.

The greatest depth of the tunnel under ground is eighty-five feet, and it comes within fifteen feet of the river bottom at one point. Sir Joseph Hobson, the engineer in charge of the work, is a Canadian by birth, and is a member of the Institute of Civil Engineers of England, of the American Society of Civil Engineers and also of the Canadian Society of Civil Engineers. The machinery necessary to the construction covered several acres, including a complete electric light plant, machine shop, air engines and pumping stations, hoisting engines and boilers, a steam-heating apparatus and many other contrivances.

## The Willard Architectural Commission Models.

*Editors Inland Architect:* New York, September 10, 1890.

Many of your readers will be glad to know that on Sunday, September 7, the steamer La Champagne, from Havre, brought to this port the large models (one-twentieth full size) of the Parthenon, and the main façade of Notre Dame de Paris, to be followed later by the other façades of that splendid example of French mediæval work, as well as by models of the temple of Karnak, the Pantheon, the Arch of Constantine, St. Trophime, etc.

The Parthenon and Notre Dame will be set in place in the Great Hall of the Metropolitan Museum of Art as soon as the articulation of the multitude of their various parts has been achieved by the accomplished formatore, Mons. Jolly, who accompanies them with an assistant. Mons. Jolly did the work in Paris under the constant supervision of the celebrated archæologist and architect, Mons. Chipiez, and the restorations shown in the model of the Parthenon embraces the latest results of the latter's profound study of the subject.

N. Le Brun, President.
A. J. Bloor, Secretary.
Emlen T. Littell.

## New Publications.

BRICKMAKING AND BURNING. T. A. Randall & Co., Publishers, Indianapolis, Indiana. Price $2.50.

This is a handsomely bound and valuable work, being a practical treatise on brickmaking and burning, and the management and use of different kinds of clays and kilns for burning brick, with a supplement for new beginners in that work, and hints to bricklayers and builders. The author, J. W. Crary, Sr., is a successful brickmaker of many years' experience, and in this book has given in a plain, practical way his views and experiences in all the details of the work. The book is a veritable storehouse of knowledge on the subject, and should find a place in the library of every worker of clay. There is also much in the book of interest to architects and builders.

THE STEEL SQUARE AND ITS USES. Part II, by Fred T. Hodson; published by the Industrial Publishing Company, New York. Price $1.00.

It is not every man who can tell what he knows entertainingly, and fewer still that have anything to tell worth knowing, if they could. This author is in the category of those who can tell what they know and have something to tell really worth knowing, and capable of doing it in a masterly manner, *vide* his many practical books on building mechanics, which are models of simplicity and conciseness. Part II indicates plainly that it is a necessary sequel of Part I, which met with such a hearty reception from the mechanics of the country that the publisher was able to dispose of over 150,000 copies in an unprecedented short time. It is safe to say the author will lose none of his enviable reputation by the writing of this latest book, nor does one need to be the son of a prophet to foresee as large a sale of Part II as there was of its predecessor, since it would be difficult to conceive of an ambitious mechanic who would be willing to forego the possession of such a book as this, which contains information almost as indispensable to him as the knowledge of his trade.

## Mosaics.

It is notable that the *British Architect* selects four of the thirty-four illustrations in the catalogue of the Boston Architectural Exhibition for reproduction, chosen as "the best indications perhaps of quality we could have chosen amongst the Gothic, Old Colonial, Romanesque and Italian." The subjects are "An Entrance, Erie," by Green & Wicks, architects; "Sibrary, New London," by Shepley, Rutan & Coolidge, architects; "An Entrance, Philadelphia," by W. Eyre, jr., architect, and "House at Swampscott," by Ed. T. Hapgood, architect. Regarding these, the journal says: "The little house at Swampscott is quiet and simple in effect, and compares favorably with the many outrageous designs which are built up from a study (or perversion) of the old colonial wooden houses. The little Gothic door-way (Mr. Eyre) is a quaint and interesting feature in what appears a somewhat coarse and unattractive frontage, while the library and other entrance doorways show with what ability Romanesque and classical types have been adapted."

The current (October 4th) issue of *Architecture and Building*, of New York, is devoted to the study of schoolhouse architecture from both the point of view of the teacher and the architect. The issue contains twenty-one different designs by architects who have achieved distinction in designing buildings for school purposes. The editorials embrace the subjects of modern schoolhouse design, damp courses in schoolhouses and reference notes to technical matters, and the subjects referred to in the general text are, "The Growth of School Architecture in the United States," by Hon. Andrew S. Draper; "Ventilation by Windows and Fireplaces," by Hon. William T. Harris, Commissioner of Education of the United States; "The History and Development of the New York Trades' Schools," by Col. Richard T. Auchmuty; "Fireproof Stair Construction in Schools," "Present Methods of Sanitation in Public Schools;" "The Heating and Ventilation of Schools." A brief review of the work done by the United States Bureau of Education, with a list of monographs on topics of educational interest, and "A Visit to the New York Public Schools," by one of the editorial staff, describing technically the details of construction adopted in the new buildings now being erected.

## Our Illustrations.

Bresler Block, Bay City, Mich. D. P. Clark, architect.

Masonic Temple, Richmond, Va. Jackson C. Gott, architect, Baltimore, Md.

Stable for Mrs. Philip Fresenius, New Haven, Conn. C. H. Stilson, architect.

First M. E. Church, South Birmingham, Ala. Weary & Kramer, architects, Akron, Ohio.

Sketch for Dining Room Interior in a house in Cleveland, Ohio. J. A. Schweinfurth, architect, Boston, Mass.

Residence at West Toronto Junction, Ontario, for Mrs. H. F. D'Eye. Ashton Pentecost, designer and delineator, Chicago.

Cincinnati Architectural Club, competition. Pen and ink rendering of the Sinton Residence, Cincinnati. First place, John Zettel; second place, Arthur Stedman.

Municipal Courts Building, Detroit, Mich. Hess & Raseman, architects. This building was erected to accommodate the police courts and clerical offices in the first floor. Second floor contains offices for the poor commission, and the third those for the recorder's or criminal courts. Basement is utilized for the prisoners' detention rooms, police room and prisoners' cells, also the heating apparatus and fuel rooms. The building is heated and ventilated by the "blower system." Material, red brick and Newport brown and Portage Entry red sandstone. Cost, $60,000.

PHOTOGRAVURE PLATES.

(*Issued only to subscribers for the Photogravure edition.*)

Assembly Church, Baltimore, Md.

Residence of Senator Sawyer, Washington, D. C.

Chicago Cold Storage Exchange. Adler & Sullivan, architects.

Fleming Building, Washington, D. C. Jas. T. Windrim, architect.

From residence of Mr. Chaffin, Washington, D. C. H. L. Page, architect.

Stable for Mr. Ross Winans, Baltimore, Md. Wyatt & Sperry, architects.

Residence for Mr. H. H. Reese, Evanston, Ill. Beman & Parmentier, architects, Chicago.

Residence of Mr. C. P. Mitchell, Evanston, Ill. Raeder, Coffin & Crocker, architects, Chicago.

Phelps Association Building, New Haven, Conn. McKim, Mead & White, architects, New York.

Entrance to "The Shoreham" Apartment House, Washington, D. C. Hubert, Pirsson & Hoddick, architects, New York.

## Building Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, Ill., October 10, 1890.

Advices from many commercial and manufacturing centers indicate that a general improvement in the volume and character of business for this month is at hand. Except among jobbers of certain products there is no surplus goods or material. A pretty even balance has been maintained between production and consumption. Builders and contractors report great activity in cities and towns. A great deal of fall work is on hand and much new work yet remains untouched. From various quarters word is received that winter inside work will be more abundant than usual. Material of all kinds is in abundant but not excessive supply. Lumber, both Northern and Southern, has been in good supply and at reasonable prices. Saw and planing mills have had but little idle time during the regular season. Brick manufacturers have been remarkably busy all season and as a rule have dictated prices, the demand for face brick generally exceeding the supply. Iron and steel makers, and manufacturers of nails, sheet iron, wire and hardware, heavy and light, have had a remarkably good season, but competition has kept prices at a lower point than many appreciated. Bridge, car, locomotive, and ship and boat builders have all been kept quite busy, and at this time much winter contract work is being placed. Healthful trade conditions exist throughout the country. The monetary stringency is a thing of the past. Business men feel secure against depressions. The productive capacity of the country is growing rapidly, but it is not fair to say that the expansion is too rapid. Capital is seeking investment in all manner of productive enterprises and in all sections of the country. Credit is not shaken by serious commercial failures. Banking facilities are being extended into the newer sections. Railroad work is projected in new localities and it now seems probable that next year's mileage would be considerably in excess of this. The West and Northwest is gaining in wealth and population relatively faster than other sections, and for the coming year a host of new and important enterprises are in contemplation. The effect of the late revision of the tariff may be toward a slight depression in some lines until its true character is better understood, but this effect will not be prolonged.

## Synopsis of Building News.

**Allegheny, Pa.**—The First Presbyterian Church is having plans prepared for a new church to cost about $52,000. The new building is to be of stone.

**Chicago, Ill.**—Architect Clinton J. Warren: For McElroy & Keeney, preparing plans for fifteen three-story residences, to be erected on Ellis avenue; they will have stone fronts, steam heat and all the improvements; cost $150,000. For L. J. McCormick, made plans for remodeling building at 84 to 86 La Salle street; will put on a new front of brown brick and terra-cotta, also add three new stories, the first two stories to be of ornamental iron and plate glass; will put in two elevators, steam heat, electric light, new plumbing, marble wainscoting, tiled floors, steel beams and columns, fireproof vaults, etc.; cost will be $100,000. For A. F. Links, planning a four-story apartment house, size 100 by 125 feet, to cost $50,000, to be erected corner of Twenty-third street and Wabash avenue; it will have pressed brick and stone front, steam heat, elevators, electric light, etc. For William Keogh, made plans for a three-story residence, on Drexel boulevard, near Forty-third street, to have a Raindrop brown stone front, with granite columns, etc.; cost $20,000. He is also preparing plans for remodeling the Beaurivage Hotel; it will be entirely renovated at a cost of about $200,000.

Architects Ostling Brothers: For Charles T. Messenger, making plans for five two-story dwellings, to have stone fronts, furnaces and the modern improvements; cost $30,000; to be erected on Evanston avenue, near Wellington. For Jacob Dolson, a three-story store and flat building, on Wentworth avenue, near Fifty-first street; cost $10,000. For C. J. Blomstrom, corner of Forty-second street and Ellis avenue, a four-story apartment building, to have a Bedford stone front, elevator, steam heat, etc.; cost $50,000.

Architect Thomas Hawkes: For the Price Flavoring Company, a six-story office and manufacturing building, on the southwest corner of Illinois and Cass street; it will have a front of Indiana pressed brick, with blue Bedford stone trimmings, elevators, steam heat; cost $45,000.

Architect D. A. La Pointe: For Kenney & Brady, four two-story flats, on Walnut street, near Sacramento avenue; cost $20,000. For George A. Bliss, a two-story flat building, on Roscoe street. For Charles F. Swigart, a three-story flat building, of Anderson pressed brick and stone, hot water heating, etc.; cost $20,000. For Capt. J. A. Beckworth, on the southeast corner of Sacramento avenue and Carroll street, seven two-story stores and flats; cost $16,000.

Architects Ruehl & Hildinger: For H. Rohn, a two-story blue Bedford stone front residence, on Seeley avenue; cost $9,000. For A. Esch, on California avenue near Ogden, a two-story stone front residence; cost $8,000. For F. Erdmann, a two-story flat building of buff Bedford stone front; cost $7,000; on Oakley avenue. For William Ruehl Brewing Company, a five-story ice machine house, cost $55,000; also planning a malt house and remodeling of storage and fermenting rooms. For A. Goldberg, planning a five-story warehouse to be built corner of Clinton and Wilson streets, to have steam heat, elevator, etc.; cost $20,000. For J. Battermann, a two-story residence, on Ashland avenue, of Bedford stone, etc.; cost $8,000. For C. Naumann, a three-story flat building; cost $9,000. For A. Nathan, a four-story store and flat building of buff Bedford stone front; cost $8,500.

Architect S. S. Beman: For the Pullman Palace Car Company, a two-story repair shop 500 feet square; cost $250,000; to be built at Pullman. For W. W. Kimball, letting contracts for residence to be erected corner of Eighteenth street and Prairie avenue; cost $100,000. For G. M. Peck, at Elgin, a two-story residence, frame, etc.; cost $10,000. For George E. Roberts, at Fort Dodge, Iowa, a two-story frame residence.

Architect Robert Rae: For J. W. Stanwood, at Eggleston, a two-story residence, of granite basement and first story and above of slate, in the gothic style; to have steam heat and all the improvements; cost $20,000; making plans. For Charles Follansbee, on Forty-fifth street near Berkley avenue, a two-story flat building, of Bedford stone front and sides, copper bays, steam heat, etc.; to cost $20,000. For George A. Otis, on Oakenwald avenue and Forty-third street, a two-story residence; cost $10,000. For John Rogers, at La Porte, Indiana, a frame summer residence; cost $5,000. For Martin Turner, at Englewood, two residences, of pressed brick and stone; cost $10,000. For F. M. Avery, at Edgewater, a two-story frame and stone residence; cost $7,000. For Frank Thacker, on Forty-fifth street and Greenwood avenue, two frame and stone residences, to have steam heat and all the improvements; cost $30,000.

Architect A. L. Schellenger: For Jerry Sullivan, a three-story residence at 3241 Prairie avenue; cost $15,000.

Architects Lutken & Thisslew: For M. Knudson, a three-story store and flat building, on Western avenue near Division street, of Anderson pressed brick and Bedford stone front; cost $8,000. For M. Holm, on northeast corner of Erie and Bickerdike streets, a three-story flat building; cost $7,000. Also planning a four-story store and flat building, to be erected on Milwaukee avenue, to be of Anderson pressed brick; cost $9,000.

Architect August Bessler: For John Krapf, at Fifty-seventh and Halstead streets, a three-story store and flat building, of St. Louis pressed brick and Bedford stone; cost $18,000. For Wm. A. Popp, at 723 Larrabee street, a three-story store and flat building, to have stone front; cost $10,000. For A. C. Blaurock, at Maywood, a two-story frame residence, Want gas machine, etc.

Architect C. C. Miller: For W. J. Wilson, planning a five-story store building, to be erected on Canal street opposite the Union Depot. It will have a front of 100 feet, by 150 feet deep. The front will be of cut stone, iron and glass; it will be of mill construction, have steam heat elevators, electric light, fire escapes, etc.; cost $100,000.

Architects Bell & Swift are preparing plans for the Campbell Park Presbyterian Church; it will be 60 by 85 feet in size, of pressed brick and stone, with accommodations for a congregation of about seven hundred; the cost will be about $20,000.

Architect Perley Hale: For J. C. & J. Beifeld, on Bowen avenue near Grand boulevard, planning a block of five stone front residences, to have furnaces and all modern conveniences; cost $35,000. Also getting out plans for a block of twenty-two three-story stores and flats, to be erected on Halsted street from Fifty-sixth to Fifty-seventh streets. They will have stone fronts, the modern sanitary arrangements and cost about $160,000.

Architect Charles S. Frost: Making plans for chapel to be erected on Butterfield street near Thirty-ninth, for the Presbyterian Church. It will take the place of the old original Railroad Mission Chapel on State street. It will be constructed of rockfaced stone; cost about $30,000. He also made plans for a two-story library and hall building, size 50 by 76 feet, to be erected at Wheaton, Illinois, for J. Q. Adams. For the North-Western Railway Company, Dixon, Illinois, station 25 by 80 feet in size, with express building 25 by 30, to be built of pressed brick and stone with slate and copper, platform, sheds, etc. For the Illinois Central Railway and North-Western jointly, a station 22 by 102, of pressed brick and stone, at Freeport, Illinois.

Architect John Duncan: For Howard & Berwin, on Thirty-first street and Grove and Park avenue, a seven-story and basement apartment building, 100 by 110 feet in size, of granite for first two stories and above of pink Kasota stone, with towers and roof of red slate. It will be strictly fireproof, with marble entrance hall and vestibules, steam heat, two elevators, electric light, gas ranges, etc. A café will also be located in the building; the cost will be about $250,000. He has also commenced work on a store building; cost $50,000; on the corner of Polk and Clark streets.

Architect E. R. Krause: For Harry Rubens, on La Salle avenue, north of Carl street, a six-story apartment building; cost $43,000; the front will be of Anderson Roman brick, with terra-cotta and stone; will have hard wood interior, steam heat, elevator, gas ranges, electric light, etc. He is getting out plans for a five-story store and flat building, to be of pressed brick and stone with copper bays, etc.; cost $40,000.

Architect D. S. Pentecost: For Howard & Berwin, corner of Morgan and Jackson streets, a three-story apartment building, of Anderson pressed brick and Bedford stone; cost $75,000. He has also just finished plans for a block of three-story and cellar stores and flats, to be built on Kedzie avenue and Belmont; they will have St. Louis pressed brick and stone front; cost $45,000.

Architect L. G. Hallberg: For R. A. Meiswinkel, on corner of Belmont avenue and Clark street, a four-story store and flat building, 110 by 106; to be of pressed brick and stone; cost $100,000.

Architects Howe & Shelton: Making plans for a six-story apartment building, 100 by 200; cost $100,000; to be of pressed brick and brown stone, with copper bays, marble and mosaic work, elevators, steam heat, electric light, etc.

Architect J. L. Merriam: For J. N. Cunning, a four-story store and flat building, corner of Adams street and Center avenue; cost $50,000.

Architect F. B. Townsend: For W. Campbell, on Thirty-fifth street and Calumet avenue, a block of stores and flats; cost $50,000. For F. M. Chapman, five dwellings, stone fronts, furnaces, etc.; cost $20,000. For C. W. Lobdell, two residences; to have Bedford stone fronts; cost $16,000.

**Cincinnati, O.**—Reported by Lawrence Mendenhall. The buzz of the playful mosquito is heard no more in the land for a season, but busy contractors present *their bills* just the same. They are like insurance agents, not to be killed off, but not always paid properly for the risk they run from employing sometimes irresponsible sub-contractors in order to secure a contract within the bounds of the owner's limit. A good, honest contractor will never overcharge for first-class work, and owners will find (like I did) that the best are not always the cheapest. A large shop does not necessarily denote superiority, but the first question to be asked should be "are you a mechanic," and let the answer, if affirmative, be proven by the work.

Contractors are hurrying their work toward completion, for the indications are that we will have an early winter.

The competitive designs for the Odd Fellows' Temple were exposed to public view a few days ago, but at this writing the successful one is unknown. There were ten designs submitted, all showing careful study, the majority of course being from Cincinnati. The problem in design was how to preserve

the idea of a temple in grappling with the question of revenue from stores and offices. Space was reasonably well utilized in all the designs, although one or two I think showed a little lack of familiarity with the requirements of lodge rooms. One design was quite Rhenish in its treatment, but the prevailing style was Romanesque. The cost was to be about $225,000. It is not my intention to criticise or enter into a detailed description, for that is entirely out of my province, to say nothing of the effect produced by stepping upon corns. However, let these words act as a soothing balm, viz: that everyone can't be first, and that in defeat there is sometimes a victory.

Mr. William Martin Aiken has taken unto himself a new rib, so to speak, and by this time the osseous addition has become thoroughly a part of himself. The new firm now reads Aiken & Ketchum (Mr. E. H.), the last named being an architect well known throughout Indiana and Ohio. I know that fellow members of the craft will join this journal in wishing them *beaucoup succès*. The combination embodies no new idea, for we are all Aiken to Ketchum whenever possible.

Architect S. S. Godley has prepared plans for a residence for George B. Tebbs, of Harrison, Ohio; materials, brick, slate roof, pine finish, wood mantels, stained glass, etc.; cost, $8,000. Also, for James Heron (city), a residence; materials, pressed brick; slate roof, bells, plumbing, gas fixtures, wood mantels, stained glass, etc.; cost $7,500.

Samuel Hannaford & Sons report for Edgar A. Belden, Esq., Hamilton, a frame house of ten rooms, to have slate roof, pine finish, plumbing, gas, electric bells, stained glass, wood mantels, etc. For the Cincinnati Wire Nail Company, a frame factory, 500 feet long, one story high; at Anderson, Indiana. For W. S. Dyer, 167 Race street, a residence; material, brick, slate roof, furnace, hardwood, mantels, stained glass, etc. For George Kinsey, Grand Hotel (city), residence; materials, frame, brick and stone; slow burning construction, tile roof, stained glass, hardwood, mantels, plumbing, etc.

W. W. Franklin reports for C. W. Baker, Esq., a stone stable, complete in all its details; cost $5,000. For Messrs. Lowenburg & Bruen, Burnet House (city); materials, pressed brick, pine finish, stained glass, plumbing, bardwood, mantels, electric bells; cost $10,000.

Architect John H. Boll reports for Ludlow, Kentucky, a twelve-room school house; materials, brick, stone; slate roof, furnace, blackboards, desks, etc. Address School Board. Cost $25,000. For John Ray, a residence; materials, frame, shingle; slate roof, pine finish, plumbing, gas, mantels; cost $5,000.

Architect Adam J. Bast reports for Messrs. Roth, Meyer & Co. a pork-house; materials, brick; hydraulic elevator, tin roof, etc.; cost $6,000. Also, for Henry Muhlhauser, Esq., a flat building; materials, brick; pine finish, mantels, blinds, elevators, etc.; cost unknown.

Architect H. E. Siter has prepared plans for a large carriage factory to be erected at Miamisburg, Ohio, for the Enterprise Carriage Company of Cincinnati; size 350 by 53 feet, brick, and to be four stories high; cost $40,000. For J. B. Samuelson, a residence; materials, frame; slate roof, furnace, mantels, blinds, stained glass, etc.; cost $5,000.

Architect G. W. Drach reports for Dr. A. Schwagmeyer, a residence; materials, brick; pine finish, mantels, furnace, slate roof, stained glass, etc.; cost $8,000.

**Cleveland, Ohio.**—Building here is looking up, better than for the last two months.

Architects Cudell & Richardson: For the Lamson Sessions Co., alterations to office and works, size 30 by 50 feet; cost $5,000. Contractors, Brooks Building Company.

Architects Bacon & Smith: For L. M. Sigter, a two and one-half story brick house, 39 by 44 feet; cost $4,000.

Arcbitect John Eisenman: For Dr. H. K. and B. M. Cushing, a three-story brick warebouse, size 38 by 70 feet; cost $10,000.

Architects Lehman & Schmitt: For the Smith estate per Robert Blee, Jr., a two-story tenement building, brick, size 31 by 90 feet; cost $12,500

Architect J. N. Richardson: For the W. S. Tyler Wire Works, a four-story brick factory, size 40 by 240 feet; cost $20,000.

Architect Geo. F. Hammond: For A. C. O. Smith, a two-story frame dwelling, size 36 by 39 feet; cost $9,000. Contractors, Clark Bros.

Architects Cramer & Fugman: For John Meyer, a two-story frame dwelling; cost $5,000. Contractor, Jos. Marquardt.

Architect W. R. Budgler: For the Grace M. E. Church Society, a small frame church, size 50 by 50 feet; cost $5,300. Contractors, Hodges Bros.

Architects Shengle & Preston: For Geo. W. Richardson, a two-story frame dwelling, size 36 by 40 feet; cost $5,000. Contractor, C. A. Preston.

Architects Coburn & Barnum: For Dr. Isaac N. Himes, alterations and additions to residence, size 15 by 21 feet; cost $4,500. Contractor, Mr. Ludhorst.

Architects Hardway & Williams: For Williams Bros., a three-story brick warehouse, size 40 by 80 feet; cost $4,500. Contractors, Gill Bros.

The Martin Barris Company will erect a two-story frame office building, 30 by 146; cost $4,000. Contractor, C. A. Preston.

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| 12 | permits for brick and stone residences | $ 76,005 |
| 326 | " " wood and frame " | 334,528 |
| 128 | " " alterations " | 51,479 |
| | | $462,012 |

**Denver, Colo.**—Architects Balcomb & Rice: For Messrs. Flower & Patterson, a brick and stone residence; cost $19,500. For The Irondale Land and Improvement Company at Irondale, a hotel building, size 75 by 100 feet, brick and stone; cost $12,000.

G. R. Grippett will erect a two-story dwelling; cost $25,000.

The Barber Asphalt Paving Company have plans for a one-story frame engine house, 40 by 40 feet; cost $10,000.

Mr. H. Counter will build a two-story brick store and office building, 50 by 50 feet; cost $7,000.

A committee has been appointed to inquire into the feasibility of erecting a large convention building or auditorium, something similar to the one in Chicago. The proposed new building would form quarters for all the exchanges and Chamber of Commerce, with a large hall for national conventions, cost to be in the neigbborhood of $1,500,000.

**Detroit, Mich.**—Architects John Scott & Co. (formerly Scott, Kamper & Scott), have prepared plans for a three-story brick dwelling, 39 by 96; cost $13,000; W. H. Hollands & Son, builders.

Architects A. C. Varney & Co.: Two-story double brick dwelling, 38 by 60; cost $6,000. Also a two-story brick dwelling, 20 by 60, for W. W. Hannan; cost $5,000. Also a two-story brick dwelling, for John Alley, 26 by 60; cost $5,000. Also a two-story double brick dwelling, 44 by 57, for C. M. Davidson; cost $8,000. Also three two-story double brick dwellings, 36 by 50, for James M. Spaulding; cost $12,000.

Architect Peter Dederichs, Jr., has plans for a block of five two-story brick dwellings, for Theo. Govenfeild; $20,000. Also a $25,000 brewery, for the Exposition Brewing Company, to be 40 by 102, with malt house.

Architects Donaldson & Meier have plans for a two-story double brick dwelling, 40 by 55; cost $7,200. Also a four-story brick store and hotel, for Vinton & Co., 65 by 54; cost $15,000.

Architects Edward C. Van Leyen & Jean A. Hackett (formerly Edward C. Van Leyen), have plans for a brick block of six three-story houses, 80 by 90; cost $32,000.

Harry J. Rice is preparing plans for three two-story brick stores and dwellings, 60 by 60, for Robert Bell; cost $10,000. Also two-story double brick dwellings, 36 by 48, for same; cost $8,000.

Architect G. W. Lloyd has plans for a two-story brick dwelling, 44 by 80, for Michael Martz; cost $15,000. Also six-story brick and stone stores, to be erected by David Whitney, Jr., 30 by 100; cost $50,000.

Architects Malcomson & Higginbotham have plans for two two-story dwellings, 24 by 45, for Harcus & Lange; cost $5,000.

Architect A. B. Cram has plans for four three-story brick dwellings, 77 by 73, for Henry Casen & Co.; cost $25,000.

M. W. Scovel will build three two-story brick dwellings, 34 by 56, on Grand River avenue; cost $12,000.

W. Reich will build for Boydell Bros. a five-story brick store, 53 by 138, on Champlain street; cost $16,000.

Architect Jos. E. Mills has plans for a two-story brick and frame dwelling, 39 by 48, to be erected on Putnam avenue; cost $6,000.

**Dubuque, Iowa.**—Architect F. D. Hyde: For George L. Torbert, a two-story and attic residence; size, 31 by 52 feet; brick and frame combination, slate roof; cost $8,200. For Thomas Connolly, two-story and attic residence; size, 36 by 75 feet; brick and stone, slate roof; cost $18,000.

**Grand Rapids, Mich.**—Architect W. G. Robinson: For the Calvary Baptist Church Society, a brick, veneered church; cost $7,000; for L. K. Bishop, a two-story frame dwelling; cost $4,500; also for C. C. Philbrick, a two-story frame dwelling, to cost about $7,500; contracts not let.

Architects Mason & Rice, of Detroit: For Mrs. W. S. Hull, a five-story brick and frame residence; cost $25,000.

**Kansas City, Mo.**—Architect J. C. Stewart: For the Rev. M. J. Dwyer, a two-story residence; size 40 by 55 ft.; cost $7,000.

Architect F. Resch: For Kate Bradley, two-story residence, 21 by 42 feet; brick and stone; cost $6,000.

**Little Rock, Ark.**—Architect Fred J. H. Rickon is preparing plans for James K. Miller for three brick houses; cost, $15,000. For J. H. Harrod, a cottage on Twentieth street and Broadway; cost $2,000.

**Minneapolis, Minn.**—C. A. Cummings will erect a two-story frame dwelling at a cost of $6,000.

The Minneapolis Independent Exposition Association will build an addition to building; cost $10,000.

The Lakewood Cemetery Association will erect a stone chapel; cost $20,000.

Mr. O. H. Brown has plans prepared for a two-story residence, frame; cost $8,000.

**Ogden, Utah.**—Building is increasing rapidly here, and there is a good deal of work contemplated. Three new public school buildings will go up this year at an estimated cost of $75,000.

Architect R. O. Wheeler & Co.: For Mr. A. Allen, a three-story hotel: size 33 by 55 feet; brick with stone trimmings; cost $10,000; for the Boston Realty Company, a three-story store and office building; size 60 by 100 feet; brick and stone trimmings; steam; cost $50,000; for J. E. Dooly, a double house; size 45 by 60 feet; brick and stone trimmings; cost $9,000.

**Pittsburgh, Pa.**—Arcbitect F. A. Sauer has prepared plans for a two-story brick residence for Mrs. Thomas W. Lindsay, to have all modern conveniences; contractor F. Schmette.

Architect McBride has plans for a brick and stone dwelling for Mr. Thomas Dalzell.

Mrs. Sarah A. Reed will erect a three-story apartment house; size 52 by 38 feet; brick with gravel roof; cost $12,500.

**Rochester, N. Y.**—Architect Foster Warner is building for Mr. Wilson Soule a stone residence on East avenue; cost $100,000; to be finished in hardwood cabinet work, heated by steam, thorough plumbing and ventilating work, complete electric service and lighting, dumb waiter, etc.

Architects Thomas and E. B. Nolan bave designed for Mr. A. R. McKay, of Niagara Falls, a brick and frame residence; cost $8,000; hardwood finish, tiling, etc. For Mr. T. H. Brown, of Scottsville, N. Y., a frame house; cost $5,500.

Architects Jay Fay and O. W. Dryer have designed for Mr. A. Deveraux a brick and frame (shingles) residence to be built at Charleston, West Virginia; have steam heat; cost $8,000. A brick and frame church for the Second Baptist Church of Rochester, to seat 500 people, furnace heat; cost $8,000. For the North Baptist Church Society, a frame chapel; cost $5,000. For Henry Bolter, at Brunswick, a stone and frame residence; cost $7,000; hardwood finish. Residence for E. C. Pierson to be built at Waterloo, New York, of stone and brick, in colonial style, heated by steam, cabinet finish interior, stained glass; cost $15,000.

Architect W. Foster Kelly has made plans for a new French school on Pleasant street; to be of brick, three stories, hot water heating, gas ligbting, slate roof; to be completely fitted up for school, hall and society purposes; cost $30,000. Catbolic church, at Lyons, New York; to be of stone and brick, 62 by 118, slate roof, stained glass windows, furnace heat, to have a new set of bells; cost $20,000. Chapel on Rowe street; stone and frame; cost $3,500. Addition to school No. 30, two stories and basement, 60 by 60, new roof over whole building; cost $10,000. Dwelling house for Mr. Geo. Fields; cost $6,000; hardwood finish in hall and dining room. A brick block on east Main street for Mr. Cooney; to be three stories bigh and contain stores and flats, stone trimmings, tin roof; cost $7,000.

**San Francisco, Cal.**—Architect Samuel Newsom: For Mrs. M. A. Scott, a two-story residence; cost $10,000.

Architect P. R. Schmidt: For A. W. Wilson, a two-story frame residence; cost $14,000.

Architect A. Page Brown: For A. C. Hawes, a two-story dwelling; cost $15,000. Contractors, Duffy Bros.

**Seattle, Wash.**—A $15,000 asylum will be erected here by the "Sisters of the Good Shepherd." Plans have been prepared for a $60,000 church for the Trinity congregation, to be erected at once.

**Sioux City, Iowa.**—J. W. Parker will erect a store and office building; cost $13,000. Contractor, M. H. Ireland.

**Springfield, Ill.**—Architect Geo. H. Helmle: For Dr. Wm. Jayne, two-story brick and stone store building 20 by 50; cost $3,500. For C. J. Ross, two-story frame dwelling 28 by 48; 8 rooms; cost $3,000. For Mr. Armstrong, two-story frame dwelling 30 by 36; 7 rooms; cost $3,000.

**St. Louis, Mo.**—St. Louis Real Estate and Investment Company will erect a seven-story office building; brick; estimated cost $80,000.

Contractor J. D. Fitzgibbon is putting up a five-story brick store for S. Clubbs; cost $5,000.

The African M. E. Church will erect a brick church at a cost of $33,000; contractor, Dan Evans.

The St. Paul Episcopal Church have plans for a frame church; cost $5,000.

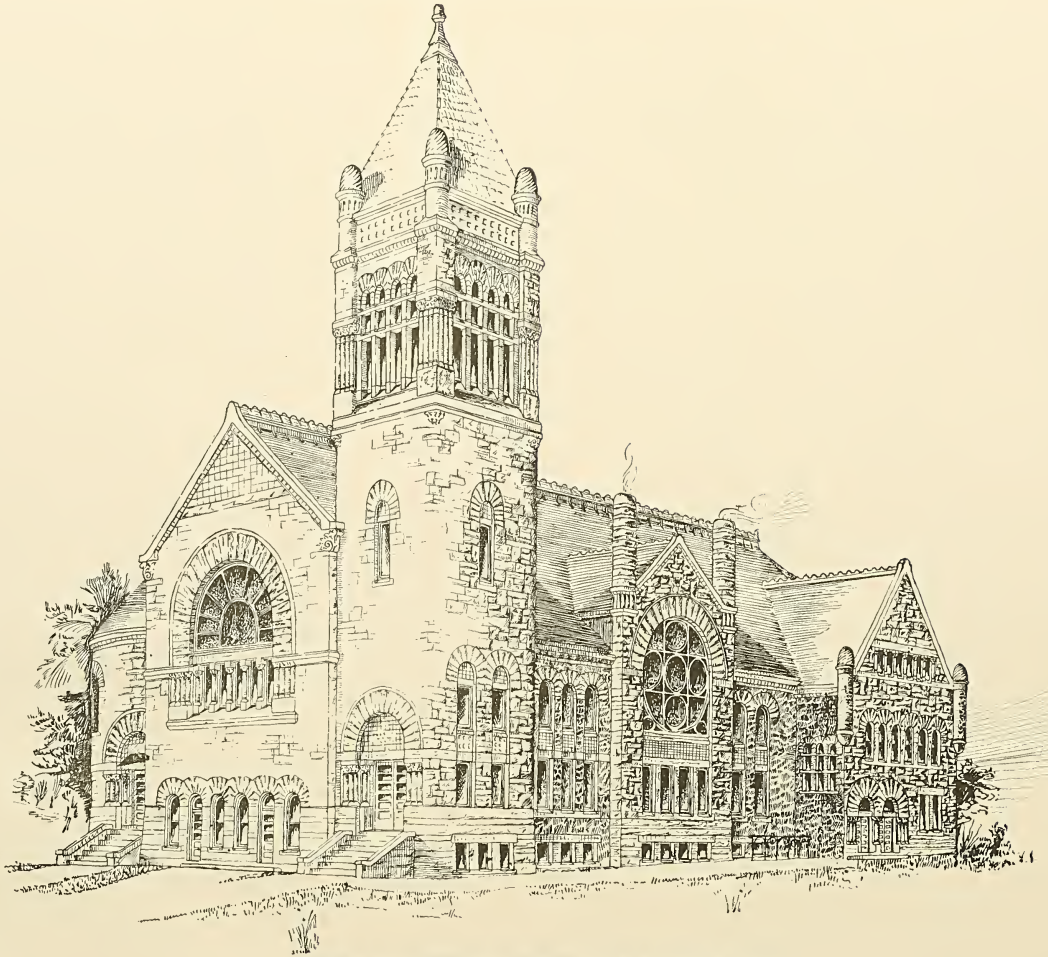
E. Peugnet will erect a two-story brick residence; cost $10,000.

Goesse & Remmer, contractors: for Mrs. R. Jacoby, a three-story brick residence; cost $12,000.

**Topeka, Kan.**—Architect Holland reports: Court house for Fairbury, Jefferson county, Neb.; cost $60,000; to be cut stone building, 88 by 108 feet, with 114 feet tower surmounted by stone dome, treated throughout in the free Romanesque style. General plan that of a parallelogram; to have 4 main entrances, slate roof, all interior finish oak, and corridors to be tiled with Georgia marble tiling. Will be heated entirely by steam and arranged throughout with all modern conveniences. Foundations will go in this fall; bids for same will be received until October 21. Brick and stone packing house for Messrs. Wolf; cost $20,000; brick front, two stories and basement, fitted with all modern conveniences adapted to buildings of that kind. Belleville College, (Belleville, Kan.); cost $25,000; stone building, two stories and basement; tin shingle roof; finished throughout in modern style, and heated with steam.

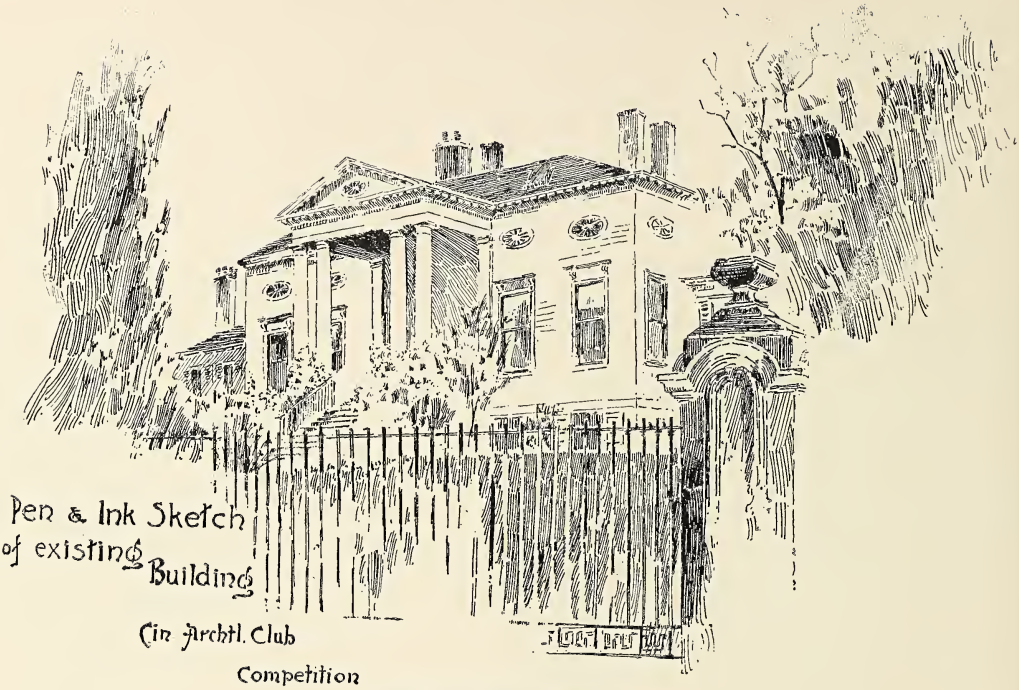
Architect Seyman Davis reports: A Unitarian church to be erected at Lawrence, Kan., as soon as plans are completed; will be of frame, finished in colonial style and will cost $12,000; a ladies' parlor, a dining room and kitchen are provided in the second story, and are of sufficient size to meet all requirements. Foundations for the University of Topeka are in, and plans in preparation for completion next spring; this is to be a stone building 275 feet long by 100 wide, with blue and white stone foundations; to have two towers, 90 feet and 140 feet high respectively; the latter will carry a water tank which is to supply entire building; building will be divided into compartments by means of fireproof walls extending from basement to roof; floors in each compartment sloping toward a drain pipe which, in case of fire, will carry to sewers all water thrown into building, thereby preventing the great damage done by water which is usual in such cases. Coöperative building, to be erected in Topeka, at a cost of $200,000; will be 500 feet square with open court in center, and is intended to accommodate 80 families; will have four fronts rendered in the Spanish Rennaissance style of architecture, and to be of four stories, with exception of the central portion of main front, which will be seven stories, and will contain dining rooms, kitchens, laundry, electric light plant, etc.; a stock company is now being formed and everything is being pushed to begin operations next spring.

**Waltham, Mass.**—Arcbitect W. M. Bacon, of Boston: For M. E. Bouker, a frame dwelling; size 39 by 43 feet; cost $8,000.

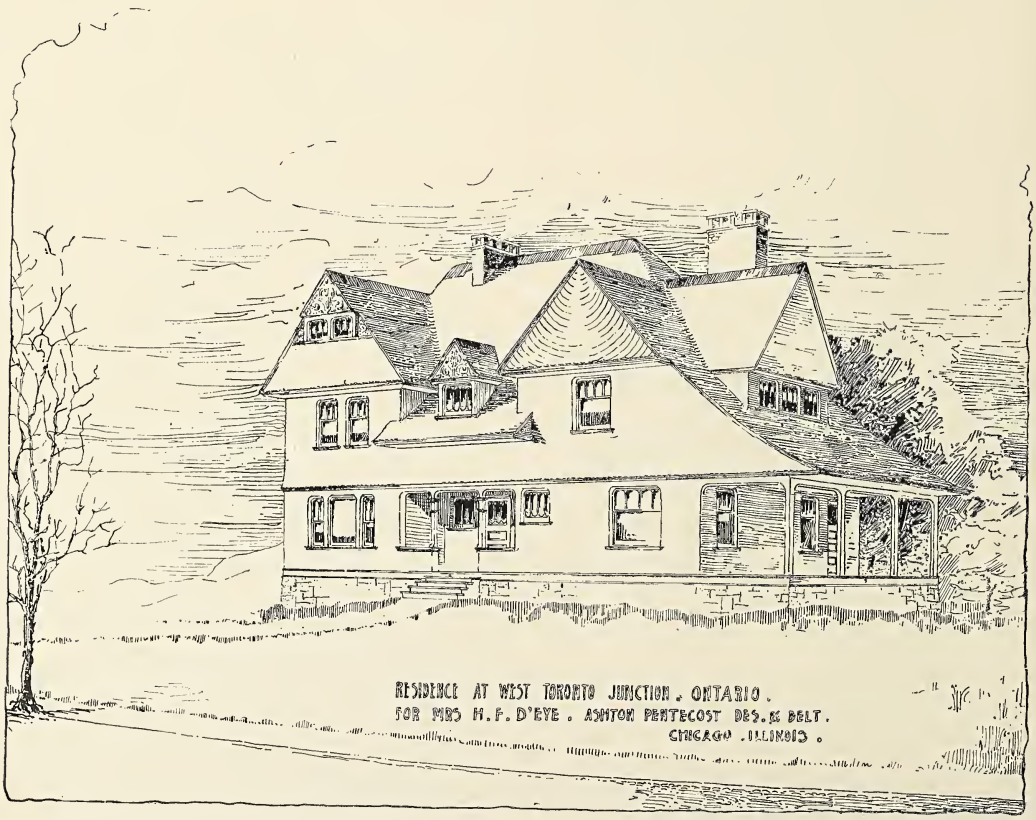


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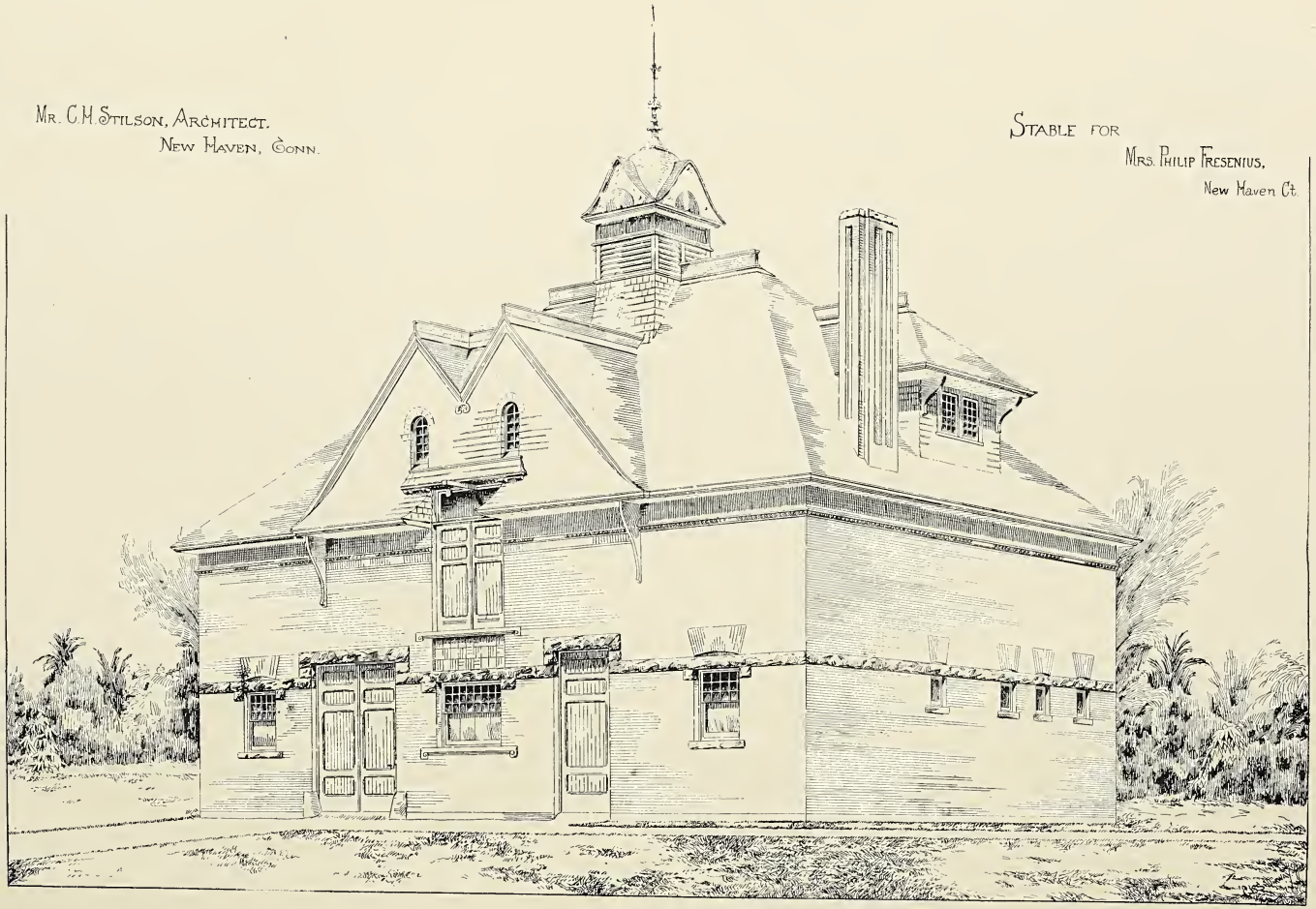



SECOND PLACE—ARTHUR STEDMAN.



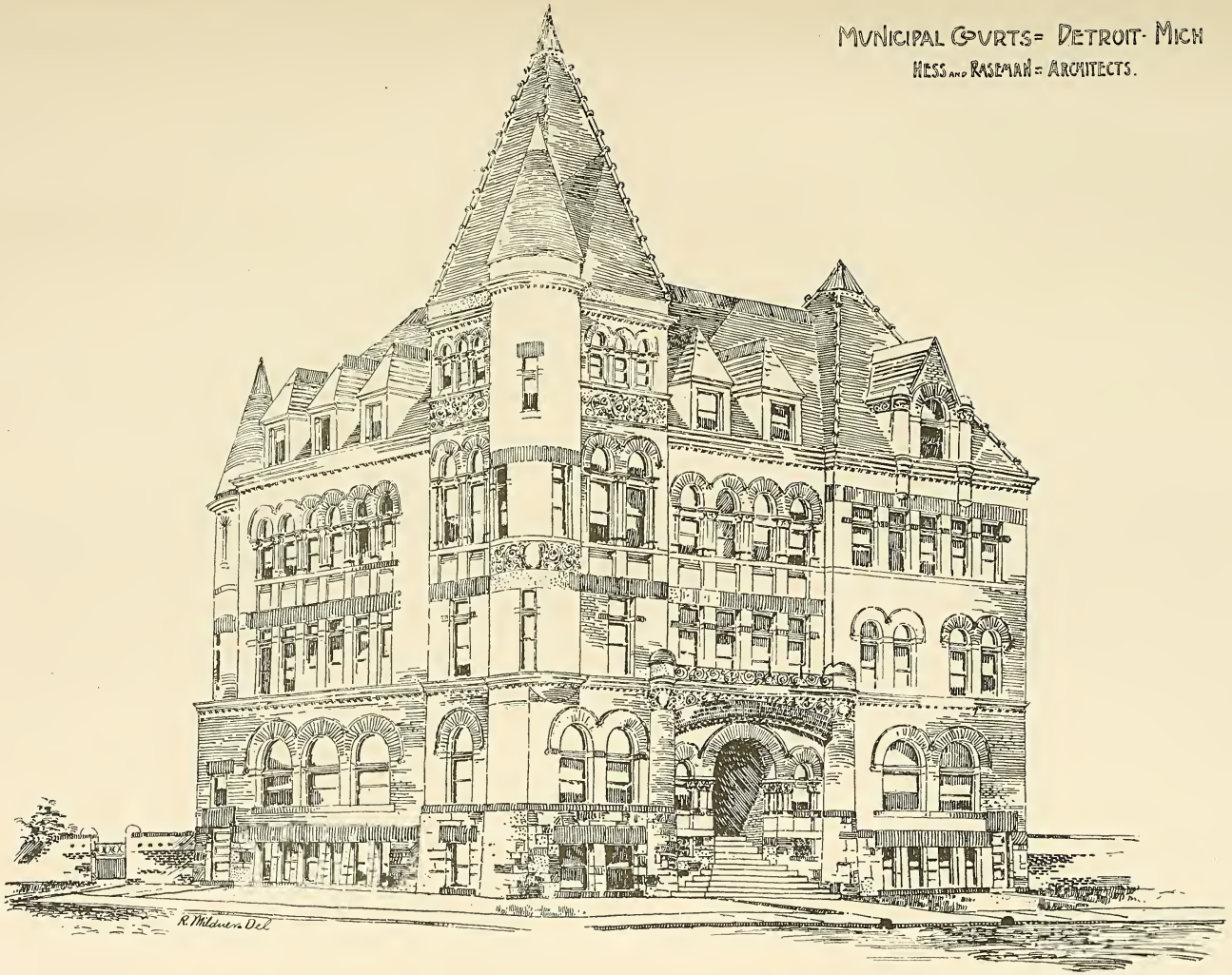
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Stable for
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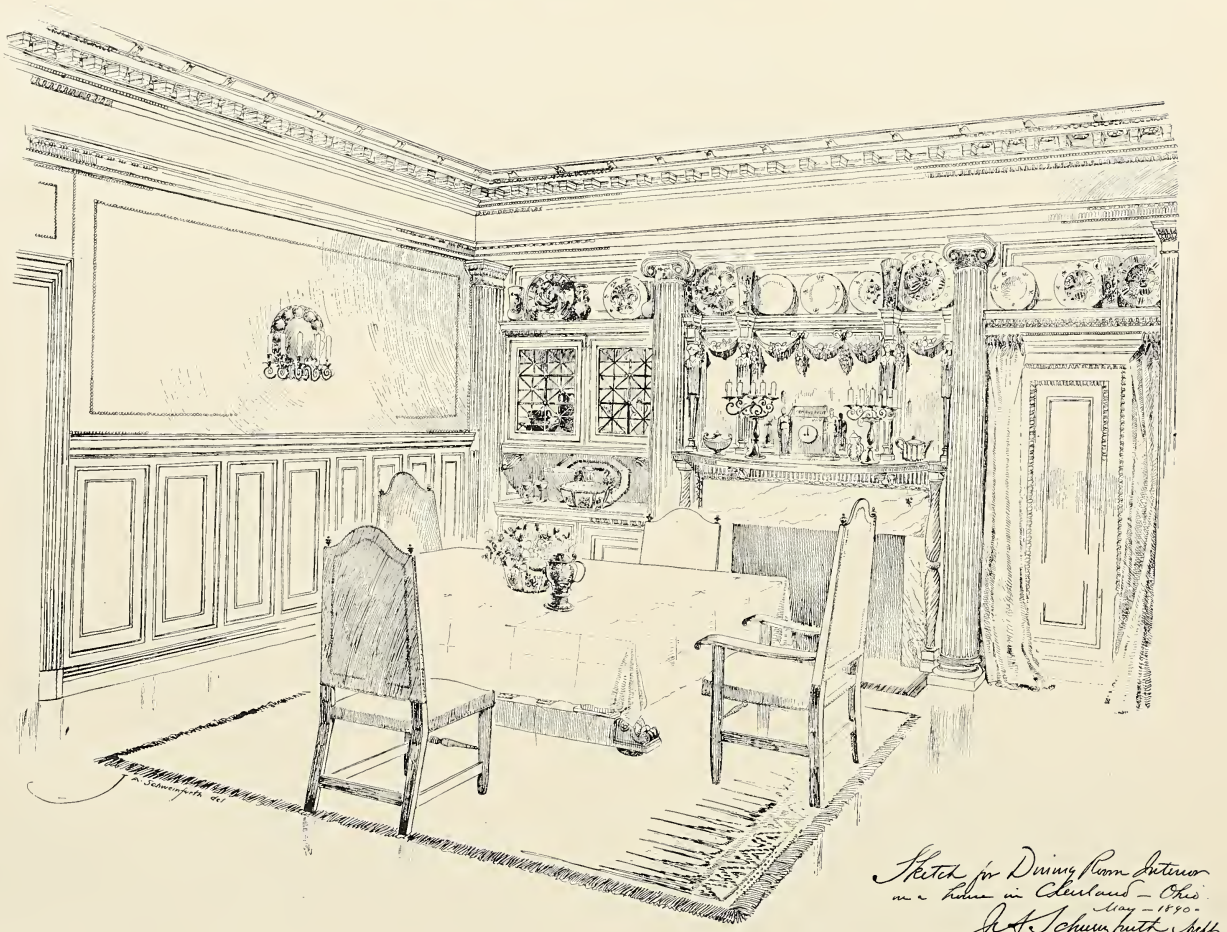
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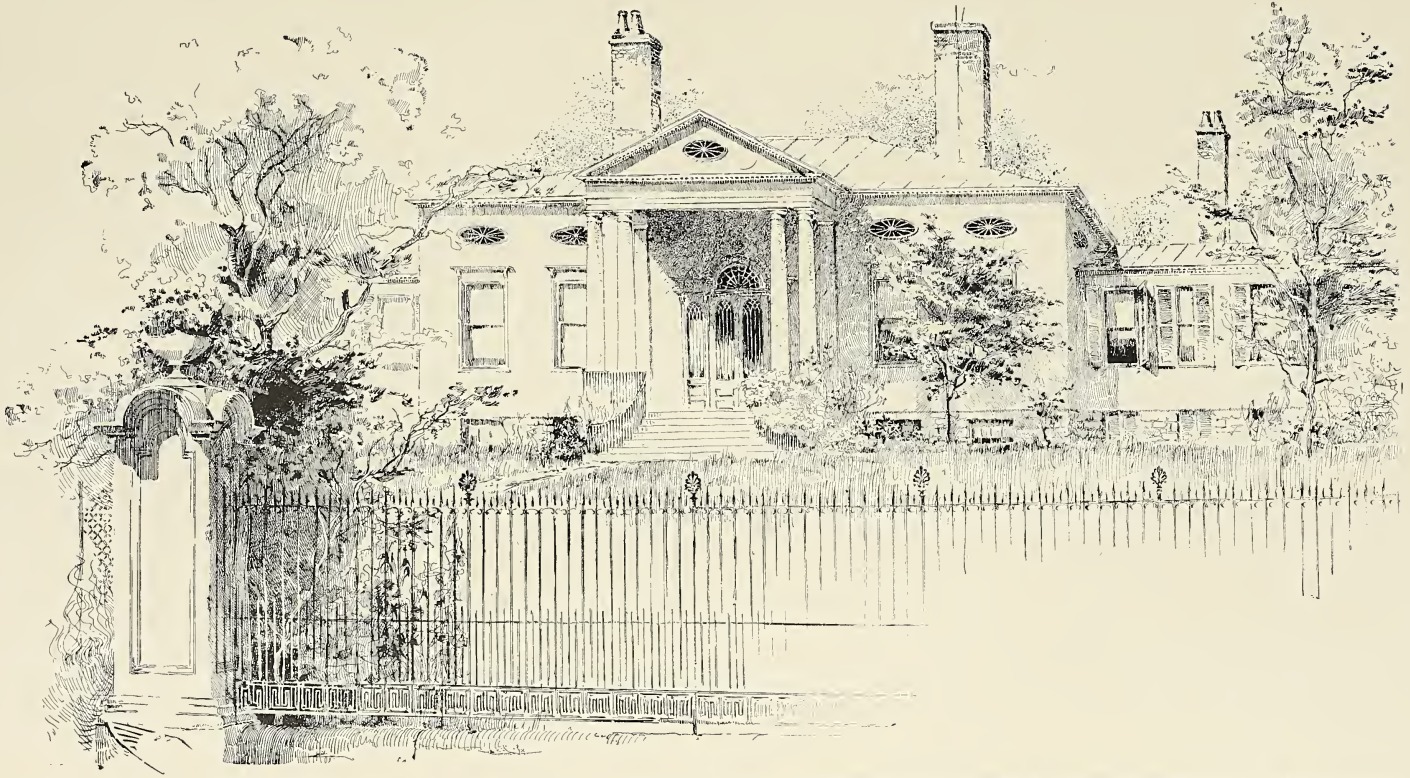




MASONIC TEMPLE RICHMOND VA. JACKSON & COLE, ARCHTS. BALTIMORE MD. 1889.

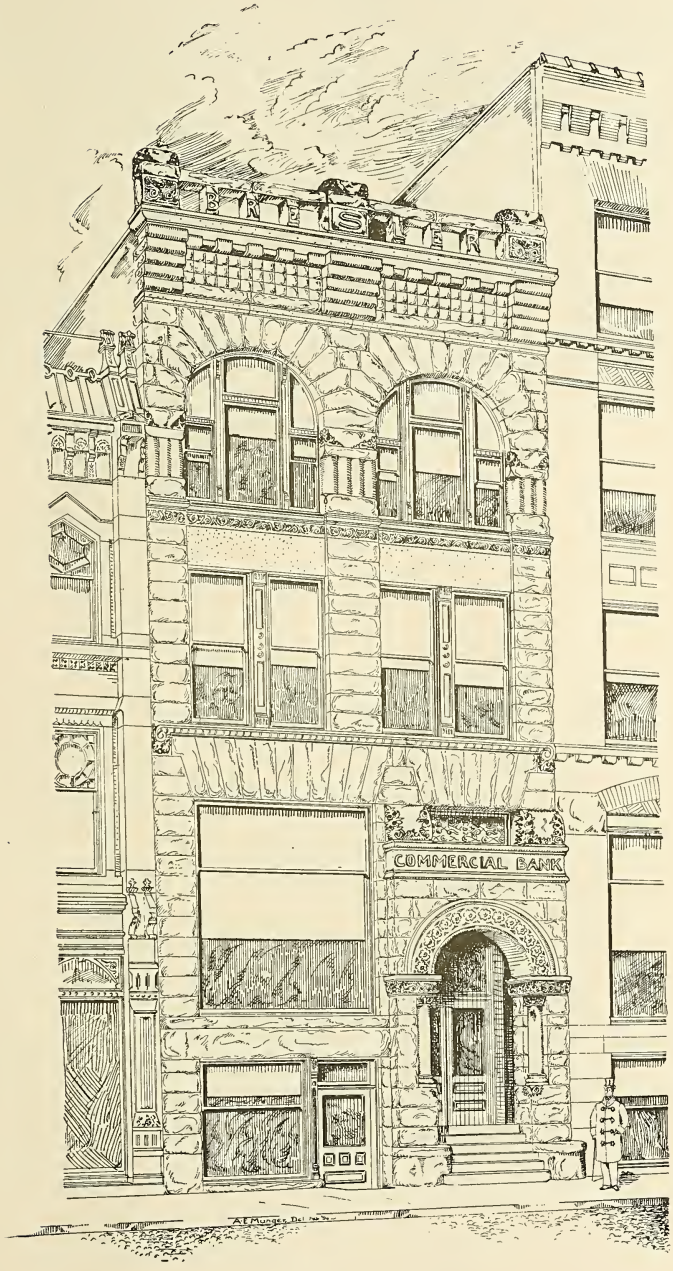


Sketch for Dining Room Interior
in a House in Cleveland – Ohio.
May – 1890.
J. A. Schweinfurth Architect
Boston Mass.



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# THE INLAND ARCHITECT AND NEWS RECORD

INTERMEDIATE NEWS NUMBER.

Vol. XVI. OCTOBER, 1890. No. 4



## THE INLAND ARCHITECT
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**Second Annual Convention A. I. A.**

The second annual convention of the American Institute of Architects was held at Washington, in the hall of the Arlington Hotel, October 22, 23, 24, one hundred and four members registering their names. Right here we would like to call attention to the fact that this convention is not the twenty-fourth, as stated in the convention programme, as the new organization dates from last year. This repeated attempt to confound an extinct association with the new American Institute makes much confusion in many ways. A matter of sentiment, largely, allowed the proceedings of consolidation to be so carried out as to preserve to the new body the old charter, but the spirit of the movement was entire obliteration of the old associations and the organization of one entirely new and distinct. We are not taking the position in order to be factious or for any reason but that of fact. If any other plan had been proposed and consolidation made a form rather than a reality, it could never have been accomplished; and by still maintaining that the old Institute exists as an organization the entire spirit of the vote that made consolidation a fact is broken, and is morally and legally wrong. We were not at first in favor of the consolidation, seeing many points of impracticability that have been only too thoroughly realized since, but when we saw a desire on the part of large numbers to give the matter a trial we did our best to make it successful, and pitch it in such lines as would make it most successful at a time when our opposition would have made the defeat of the plan certain. Therefore, we say, let us be honest and not break the spirit of an agreement even by implication because the adoption of an old name by a new society makes it possible.

**Convention Proceedings and Their Results.**

The reëlection of the officers was a forgone conclusion, every member almost seeing that the work of the first year was largely preparatory for that of the second, and that a change would in many ways be apt to destroy the work already commenced. It was regretted that illness prevented the attendance of President Hunt, but the chair was most ably filled by the first vice-president, whose prompt and decisive rulings greatly facilitated the work of the convention. The order in which the secretary kept all papers for instant reference, and particularly the facilities afforded the press by him for securing verbatim reports, was an incident worthy of record, contrasting as it does with former conventions. As we prophesied in our last issue, the report of the committee on education was "stereotyped," or rather there was no document offered that could in any way be called a report. It is hoped that this year the committee will hold at least one meeting and give a day to the discussion and investigation of plans for the better education of draftsmen. While this may be a lower and more practical plane of work than this committee consider they are appointed to perform, it should not be; in fact their attention seems already to have been turned in that direction. The discussion upon the report of the committee on clerk of works was the longest and most productive of the convention. That of the committee upon a code of ethics was a splendid, forcible statement of the present ethical status of the profession in this country, and while a few thought that an expression here and there was lacking in dignity, it seems to us that it is possible to be at times hypercritical. The criticism was, however, in the right direction and should have its effect upon future reports.

# The Science of Esthetics.*

BY HENRY RUTGERS MARSHALL, F. A. I. A.



"IS a science of esthetics possible?" This question was asked some years ago by Mr. James Sully in one of his published essays† and answered in the affirmative. Mr. Sully ably indicated, moreover, the general lines in which the development of the science seemed possible and probable. Its scope, as he sketched it out, showed up not only a wide field for investigation, which still lies untouched before us, but, at the same time, the extreme weakness of the estheticians present position; indicated, in fact, that at this time nothing worthy of the name of a science of esthetics *does* exist. It is not a little surprising that we should have reached this era in the development of esthetic work—should be able to look back on many an epoch in which the manifestation of esthetic genius has been the most prominent feature of the civilization of the time, and still that there should seem reason for asking such a question as Mr. Sully put. It indicated a felt antagonism between esthetics and science, which he was indeed compelled to acknowledge with those who unlike him do not look forward with hope or expectation to a closer bond between the two.

When we come to consider the basis of this antagonism we not unnaturally find our thought turning aside to another conflict which science has been waging with intensity for many an age—the contest with religion. Is there anything common to esthetics and religion which will account for this hostility toward science which both share?

The attitude of science is the attitude of a searcher. The scientist is looking for laws in the ordering of the phenomena which impress themselves upon him: for relations between the objective facts of nature and of his own mental experience. On the other hand, that in esthetics and religion which feels an enmity toward and opposes the advance of science appears in the attitude of a *listener* and a *follower* of commands.

In the two cases indeed the voices are very different ones—but the religious devotee on the one hand and the artist on the other are each trying to express the promptings of "inspiration"; with one it is the voice of God, with the other it is the vision of an ideal which he feels is in whole or in part unknown to his fellows. In each case the individual is submissive to an acknowledged leader, whom he believes to be supreme, and he resents the approach of a new teacher who claims superiority to his master.

If we look back at the "warfare between religion and science" we see science slowly but surely spreading its sway over regions which religion at one time claimed to rule to the exclusion of science. We see religion at first taking no notice of this advance, scorning the notion that science will be able to invade its sacred precincts; then we see her striving to avoid the invader; then, finally when the invasion must be acknowledged, raising the standard to battle with science which would become a co-worker in the same field. The contest once begun has been waged, as we know, with inestimable loss to both contestants. At times science has ceased to advance altogether, the scientific spirit has seemed to be in danger of total extinction: and then again with the energy which tyranny develops, it has seemed about to sweep religion from the face of the earth, to the inexpressible loss of the race during the age of revolution. We, in our times, are beginning to see that this conflict and the loss it has entailed has been unnecessary, that science might have advanced with a less limping gait had she not been *maimed* in the fight, and that religious influences might have been purer and more effective is result had religion not treated as a foe one whom she might have made her friend.

Now the consideration of this contest may not be unprofitable to us in relation to the antagonism between science and esthetics.

Is science as surely to spread her power over the realms which the artist is wont to claim she cannot enter? Is there to be the same contest, the same loss to both science and art through failure to acknowledge brotherhood and capacity for mutual helpfulness? I think there are evidences before us today of just such loss through lack of coöperation.* Shall we not be making a great gain if we can learn to see that science and art are co-workers in the same field; that science may aid esthetics, and esthetics crown science with an enduring glory which could not otherwise be hers—and for such fraternity we may surely hope when we consider that the study of individual impulse has developed a science of ethics which is no longer thought of as an enemy of religion—that the study of social impulses is producing something which approaches scientific form, which claims scientific individuality as a whole, and which in certain lines has truly developed into a rigid science. The "dismal science" has had its contest with religion. Smith, Ricardo and Malthus suffered intellectual martyrdom, but nowadays religious people are not thought to be treading dangerous ground when they study the Malthusian doctrine; on the contrary, it seems to be becoming habitual for the clergy to undertake the treatment of social problems, unfortunately in almost all cases, however, without proper knowledge of the subjects discussed, and therefore with loss rather than gain to science itself.

If the mental attitude of the artist and scientist differ so much as to imply lack of natural sympathy, there are not wanting elements which tend to develop a positive antagonism between the two. Cold fact will now and again take the life out of our ideals and accuracy of knowledge not infrequently has robbed a true artistic creation of all its esthetic value. But science surely bears no grudge against the imagination; on the contrary its main dependence is upon the imagination, to which it looks for those hypotheses which serve as the incentive to experiment, without which there were no scientific advance. Still the timid artist shrinks from science as from an invidious foe, whose ways he does not know, but who may occasionally harm. Cowardice gains no friends and this attitude is not only eminently cowardly, but unjust too, for it fails to recognize that science has made possible the life of many new ideals of higher worth, for every inferior one she has slain.

Or perhaps the artist takes a bolder attitude of hostility. He feels science to be an open enemy. He claims that the scientific spirit never goes with artistic production; that attention to the scientific aspect of things prevents artistic productivity and appreciation, and he is likely to bring confessions like Darwin's to witness in his favor. It is true that *extreme* effort in any one direction implies a curtailment of effort in all others, and that a man or an age given preëminently to activities which are not artistic will not give the world great art products, but this is no more true against scientific than against any other activity. Notable examples of art-masters who were eminent as widely versed in the knowledge of their times, the Leonardo da Vincis, the Goethes, rise to disprove the position that scientific attainment *per se* incapacitates a man from being a producer in art. It is true, also, that *constant and exclusive concentration of thought in one special direction* will lead to curtailment of capacity and of pleasure getting in those directions not especially connected with the chosen path. But this implies a shifting of esthetic field rather than its loss. It is the price an ardent specialist like Darwin must pay for the success he wins. It is a loss of joy in the impressions which give esthetic delight to the average highly educated man among his companions, a joy which he himself used to reach in sympathy with them; his mental life and capacities and his esthetic field have shifted to regions in which only a few of his fellows can follow him.

Well, if science is not our enemy, some artist may ask, can you show it to be a friend? Is it of any use to us?

What is science but the orderly arrangement of human experience; and is not the experience of our ancestors made use of daily in art method and practice? What age has given more study to ancient art than ours? What race of artists has turned more attention to the old masters? Esthetic method is therefore in reality a part of the body of science to-day, although its crudeness of form prevents the recognition of its relation to what we call science.

As we look back at the great epochs of art, at the styles they produced, the schools they founded, we see them to be the outcome of development and of accumulated racial experience lasting through generations with slightly changing conditions so far as art is concerned. The youth of one generation found its art environment of those products which had been sifted out as the best by the generation which preceded his own. He stepped from this educational standpoint to victories made possible because his vigor was not required to tread again the laborious path filled with failures which his ancestors had taken. And if the use of crudely recorded experience through unconscious means has gained such triumphs, what might not be the gain under systematic arrangement of experience; especially in these

*Paper read before the second annual convention of the American Institute of Architects at Washington, October 23, 1890.

†The essay referred to was published in a volume entitled "Sensation and Intuition." Mr. Sully's article on esthetics in the last edition of the Encyclopedia Brittanica justifies Mr. Herbert Spencer's earlier statement of his leadership in the world of psychologic esthetics.

*Note the prevalent notion among "practical men" that architects as a class are not practical and the tendency to oppose the artist and scientific man in the education of engineers to whom are entrusted the construction of the most permanent and most noticeable works of our time.

times when stability of conditions is so rare that racial transfer of experience is less to be relied upon.

If we reach the conclusion that science is not inimical to the artist, but may be helpful to him, two questions arise for our consideration. First, it will be asked what the science of esthetics proposes to do, how far it now exists and how it will develop in the future; and second, what is or will be the function of this science of esthetics in the evolution of human activities, how helpful to the world of science and philosophy at large, and how to the special student of the practice of esthetics itself.

If esthetics is to be considered as a true science it will be found to develop on the same lines which appear in the development of the exact sciences which are already well established as such. Science in general is based upon the observation of phenomena. In the first place, it gathers data and then seeks to relate these data in classification. This latter process involves the principles which in more complex form come before us as the method of hypothesis. No mere collocation of data, of which we see so much among the scientific workers of to-day, is of value unless these data are gathered to be grouped together, and this grouping implies the emphasis of the bond between the individuals of the group. If this bond be not clear some one of the numerous possible links is for the moment held to be true in an hypothesis, and the facts are then compared with the results which the hypothesis seems to involve. If the two coincide the hypothesis becomes a true bond of relation to aid in classification.

The gathering of data in the early stages of a science is necessarily dependent upon the *natural* emphasis of bonds of relation between phenomena. These relations being forced upon us, so to speak, make the acquirement of such empirical data the easiest first step.

A great deal of such empirical data has been collected, but it is passed from master to pupil in a blind, unmethodical way which is truly worthy of the dark ages.

The *production* of hypothesis involves no difficulties, but on the contrary is a most attractive occupation to many people.

The *verification* of hypothesis, however, is quite a different matter, it is a task filled with labor and carries with it painfulness in the disappointment of many a well-proportioned imaginative structure. But this laborious and not always agreeable work is the necessary condition of scientific advance. There is no limit to the increase of unverified hypothesis, but not until there is a demand for comparison with the facts is there a chance of living growth in any science.

And we may hope that this age of demand has opened up for the science of esthetics.

At all events, esthetics have gone through a stage of multiplication of theories, as all of us will testify who have looked into the ponderous esthetic work of the Germans, before whose daring hypotheses the efforts of thinkers of our own race appear meager. And there appears to be nowadays a general distrust of all systems, which is perfectly justifiable when one considers how little attempt has been made toward that rigid verification through which a theory must pass if it is to become part of the body of science. There is seen also the beginning of an accurate collection of data. The most notable step in this connection has been made in the youngest of the sister arts, namely, that of music, where the natural developments have been subjected to careful analysis which has produced empirically the orderly rules and arrangement of counterpoint and has shown that all of modern music can be brought into relation with the simple normal chord. This accurate beginning has led to the best scientific treatment which is to be seen in any branch of esthetics. In his notable work on "Sensation of Tone" Helmholtz shows the scientific basis from which these empirically discovered laws of harmonic relation follow necessarily. In the direction of pure form also there are examples of this scientific collection of data as opposed to the merely empirical. The renowned Fechner, whose "Vorschule d. Æsthetik" may almost be said to mark the beginning of the existence of esthetic science as a whole, has undertaken to verify the assertions of Zeising and others as to the esthetic value of rectangular forms with axes related as are the two parts of a line divided in the proportion which Zeising called the "golden section."* These experiments of Fechner's indeed have shown that there is foundation for the empirically discovered fact which Zeising emphasized, although they by no means show that Zeising's intellectual theory of unconsciously recognized mathematical relation in true. But the experiments themselves need to be carried further before any specially important theory can be based upon them.

In another direction we have the careful study of the facts of color which has led to the famous and helpful Helmholtz-Herring discussion, and lately to some especially interesting experiments as to the quantitative evaluation of color contrast, by Prof. Rood of Columbia College, all of which have esthetic significance. It must be acknowledged, however, that our science as an exact science has made very little advance. Such instances as we are able to give merely bring into prominence the general lack of development. This is due, I think, first of all to the antagonism which we have found to exist in general between artist and scientist. If the artist cares little for what the man of science tells him, so the scientist is likely to care little to investigate that which does not *especially* interest him or which he cannot readily comprehend, which he looks upon as of little *practical* value, and the more so when the artist declares that it does not call for investigation. But behind this superficial obstacle is a much more formidable one. There is a felt need of some fundamental upon which to base the science. Some general ground which shall bring the various branches of esthetics as they have already naturally developed into harmonious relation. Like all beginners we have been too much taken up with objective aspects and I think the first step for us must be in the direction of consideration of our own subjective condition in relation to art works. Our appeal must be to psychology, and psychology I think will show us that esthetics is a branch of Hedonics—the wider science of pleasure—and in the correct consideration of the relation of esthetics to all of Hedonics we are likely to obtain a fundamental principle which will greatly aid.

But psychology, unfortunately, has itself little to tell us as yet about pleasure. There is no part of mental science which is less complete than Hedonics; there are no mental phenomena which are less thoroughly understood than the phenomena of pleasure.

We cannot hope for immediate aid, therefore, from this source, but our work need not stop for lack of this fundamental basis. There is a vast amount of data which needs to be collected and formulated accurately—data which may be obtained from the expressed opinions of thinkers of the past—from the examination and critical study of art works which have come to be generally acknowledged to be of importance and of permanent value; from actual experiment in lines similar to those undertaken by Fechner in relation to the "golden section" form, by Helmholtz in relation to musical harmonies, by Rood with reference to color contrasts.

Now let us ask what this science of esthetics is to do for us. What is its function in relation to other sciences, and to philosophy, and wherein is it to serve the producer of esthetic works? Advance in one science always brings aid to the sister sciences, often in the least expected directions. In the region most directly connected with our own inquiry we see how one branch of work affects another in the influence of the harmonic theory of music upon the research in relation to color effects. The scientist has learned by many an experience that he must not be balked by the complaint of the practical man that his work is useless, for some day his results may illuminate not only the field in which he is working but other fields which perhaps appear bnt slightly related to his own. Darwin's results have influenced thought and theory in all directions. May we not hope that some aid to clearness of scientific conceptions may come from a true understanding of the wide field of esthetics which is so influential in the lives of each and all of us? If then by scientific treatment philosophy can find the true relation of esthetics to the other regions which she rules, she will gladly welcome the acquisition.

In this direction we may hope to learn the genesis of the impulse which leads the race to art production. We may look for a just conception of the development and tendencies of art production in the past and for some general notion of the ultimate end to which art must tend, as determined by the direction in which the evolution of our race is seen to be moving. It will thus give the basis for a true philosophic criticism which is so great a desideratum in our day. Further it may be expected to show the student of art the immediate end to be looked for (and as we know in many lines of philosophic movement, the immediate end by no means coincides with the *ultimate* one) and it may thus materially aid him in art production. This immediate end, can be shown, I think, to be the production of results which shall be permanently pleasurable in revival for those whom they affect. But now let us consider how far the study of esthetics scientifically can aid the artist himself.



Science in any event, will always deal to a great extent negatively with the problems of esthetics and rarely positively. It will teach us in general what to avoid if we would work in the field of the esthetic, and within this field genius will have full play and will have gained by having avoided the loss of energy implied in the taking of and recovery from false steps. And if, in the course of this study, some man finds he can do better work in art investigation than in art production, what is this but a gain to the world? A positive gain of effective scientific work in place of productive art work which would in all probability have been merely an addition to mediocrity.

I have already called attention to the notion that the intellectual treatment of esthetic subjects is likely to curtail art production of

*The golden section is reached by so bisecting a line unequally that the short section shall be to the long section as the long section is to the sum of the two or the whole line. Zeising tried to show that esthetic forms were based upon this *mathematical relation*. His theory however proved, if anything, too much. Still Fechner with true scientific spirit determined to bring the matter to experiment. He gave to a large number of persons ten cards, one a square, the others rectangles, with sides related as 6:5, 4:3, 29:20, 3:2, 34:21 (which is the relation of the golden section) 23:13, 2:1 and 5:2. An exceedingly large majority chose the square as the least beautiful; and the "golden section" as the most beautiful; while a very small number chose the square as beautiful, and none whatever rejected the golden section as ugly; the only form which was not thus rejected by some one out of 350 observers. I have repeated Fechner's experiment with a smaller number of subjects with cards still more closely related to the golden section than his cards were. The evidence points to no invariability of choice of the "golden section" card itself, but a variation of choice of cards close to and on either side of this. Which results go to show that the "golden section" shape is close to and is perhaps the average choice, but argues strongly against Zeising's theory of subconscious grouping of mathematical relations.

Confer "Vorschule d. Æsthetik" and "Zur Experimentalen Æsthetik" by G. T. Fechner.

high grade. We cannot but wonder at the defense of such a notion when we consider how many theorists of the highest position among those who speak our tongue, but more especially among the Germans, have based their esthetic theories upon fundamentals which are entirely intellectual; where clear vision seems lacking the very best of them (such as Kant and Helmholtz) adopting with little hesitancy the theories of subconscious intellectual action as satisfactory to account for esthetic values.

The study of art history has tended to substantiate the notion of the inverse relation of art production to intellectual consideration of esthetic matters, for as it shows ages which are unproductive of art work of high value it seems also to show that the age of non-production is one of devotion to pure critical formalism.

It seems to me that it might well be claimed that the studious age has been the parent of the productive one rather than its bastard brother, but the facts are in all probability accounted for, not by any lack of critical spirit during ages of great art outcome, but by the emphasis of critical work which the absence of notable art production brings into prominence.

Guyau, whose early death is so much to be deplored, thought the lack of art product to be due to the approaching death of a social age, and as such looked upon it as a sign of loss of excessive vigor which is necessary to the appearance of genius. This last explanation is doubtless true, whether the loss be found to be due as he thinks to social disease or even if it be traceable to overemphasis of scientific or any other concentrative activity. For, as we have already seen, any exclusive work will curtail effective activities in other directions. This, however, is little more than a statement of the limits of capacity, an acknowledgment, in fact, of relative incapacity; but surely we should not favor a position which leaves incapacity in control, and which would deprive skill of its best tools.

We should certainly oppose any educational scheme which would lead the art student to any exclusive, absorbing attention to scientific *or to any other aspect of things*, for all men must learn to give as well as take. We cannot continually be students, if we are to study to the best advantage we must alternate with our study the activities which this study makes possible, Our educational system in general appears to me to fail in this regard. The general public, at all events, have gained the notion that assiduous and continuous study can make the subjects studied valuable as parts of our permanent mental store, without bringing the acquirements into relation with effective life of practice.

Our contention and influence, therefore, should look to the avoidance of extremes of absorption in study, but on the other hand to the fostering in the artist of the habit of study as he produces, so that as he grows in experience he may gain new skill—for knowledge is skill.

I bring this matter before this body because it seems to me that at this time, of all art workers, the architect has the most to gain from the scientific study of esthetics, and is, perhaps, in the best position to give in return. The materials which he uses in the production of his art works are very much the same as were those of many thousand years ago; and many of the needs which define his art have in like manner remained unchanged; the same cannot be said in equal degree of any other line of art product.

Thus the architect has before him a greater accumulation of empirical data than any other class of artists. He reads, in the types of buildings which the past has given us, the results of a vast amount of elimination of the ugly and the gradual fixation of such qualities as have been found to be relatively permanent in pleasure—giving revival. And now he should be able to treat these data scientifically—to discover the nature of the elements which produce in him the esthetic thrill which make his object beautiful, and perhaps the ultimate cause of the pleasurableness gained.

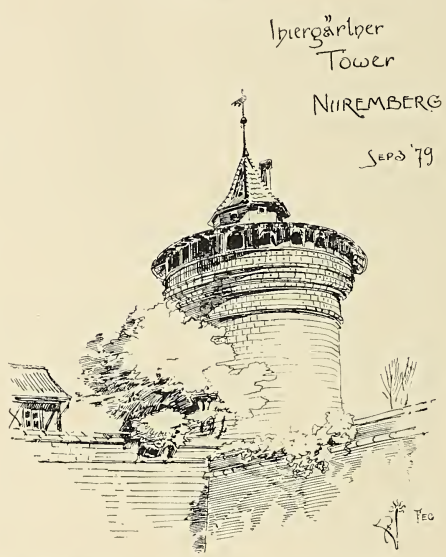
The gain of power which is to result for him cannot be easily overestimated. To know by positive evidence that certain forms give relatively permanent pleasurableness to the mass of men, and that others give merely temporary pleasure under special conditions to a few (as, for instance, we learn of the general form approaching the so-called "golden section" and the square, respectively, from such experiments as those of Fechner above mentioned)—to gain such knowledge is of vast importance to the designer and to his pupil. It seems to me, also, that the architects of the world have, of all the artists, the greatest encouragements to become a learned profession and to make their societies learned societies. They can be no dreamers; they must first of all be practical men, and it is this practicality—this willingness to conform to the facts of nature—which makes the basis of scientific advance. I feel very strongly, however, that it is to our universities that we must look for effective aid. Apart from the department of literary esthetics comparatively little help has been given by them to art students, even from the technological side. We find, indeed, departments devoted to art, and the architect perhaps cannot complain, for the best developments of such art departments as exist are devoted to the training of students of architecture. But, speaking broadly, there is little technical aid from this source.

It is recognized that a science has taken but its first step when the student must gain his technical knowledge from some special master rather than in a school of masters, the matter and method of whose teachings are subject to open critical study. The lawyer and physician used to gain his education from a single master in this way. But this method is seen to be objectionable for the average pupil, as liable to produce narrowness of view. Art students, however, with few exceptions, are forced to adopt this archaic method, although architects, indeed, no longer need to complain in this direction.

It is to be specially remembered, however, that when a science has gained schools of technical method it has taken but its first step. What it then needs is advance in theoretical study and in investigation, and here the university may most effectively aid. The study of the theoretical and philosophical principles of ethics and logic, the sciences of the good and the true, find encouragement in every university; but the science of the beautiful in these theoretical and philosophical aspects demands attention and encouragement of original investigation, which today it does not receive. Let us hope the near future will see marked developments in the art departments of our universities and a serious encouragement in them of the scientific treatment of esthetic problems.

## History of American Institute of Architects.*

BY A. J. BLOOR, F. A. I. A.




BEING asked by the Committee of Arrangements for the twenty-fourth annual convention of the American Institute of Architects (to be opened in Washington on the 22d inst.) for a brief account of its status and history, I turn to a letter of mine of date August 15, 1887, and with some modifications rendered necessary by the changes that have occurred during the three years intervening, I herewith transcribe its opening paragraphs, and add what seems to be necessary for current purposes.

Nearly fifty years ago (December 7, 1836) the half score or so of properly trained architects practicing in the United States met in New York and organized an "American Institution of Architects." Only one of its members survives, at a very advanced age, Mr. Alexander J. Davis, the architect of the University of the City of New York and of much other good work, and now a corresponding member of this pioneer organization's lineal descendant, the present Institute.

The "Institution" did not last, however. It was impossible it should. Its members were but a handful at the best, and they lived too far apart to gather from each other the warmth and sustenance and strength necessary for a brotherhood. It flamed up, flickered, flamed up again, but finally died out, or at least apparently so. But the vital spark still remained in its ashes, and some ten years afterward an organization was again initiated in New York, under the name (so wisely retained in its recent reorganization) of the American Institute of Architects, and with much better prospects than before; for meanwhile there had appeared on the scene American youth of the higher technical training, while the previous influx of well trained foreign practitioners had continued, thus supplying elements that eagerly coöperated with the remnant of the small band of founders of the "Institution" in the endeavor to establish, on permanent foundations, a fraternity consecrated to the high aim of "uniting in fellowship the architects of this continent, and in combining their efforts so as to promote the artistic, scientific and practical efficiency of the profession."

But it was not until 1857—just twenty years after the old "Institution" was called to ratify its construction in the Pennsylvania Academy of Fine Arts in Philadelphia—that those who remained of its members united with this fresh stock in obtaining a charter for the society, which they did from Judge Roosevelt, of the Supreme Court, with cordial wishes from him for their success. For four years the organization gathered in numbers and strength, till 1861 the civil war broke out and absorbed most of its members. The Institute did not disband, however; it simply suspended its meetings and operations for less than three years, during which period the functions of

*Paper read before the second convention of the American Institute of Architects, at Washington, October 23, 1890.

secretary of the board of trustees were performed mainly by Mr. Charles D. Gambrill, and for a short time by Mr. Emlen D. Littell; and, before the close of the disturbance, resumed its functions. But, incorporated though it was in New York, its membership nevertheless covered, however sparsely, the whole Union, and to some extent the contiguous British provinces; and the roll gradually increased till in 1867, ten years after its incorporation, it became necessary to meet the local exigencies of its outlying constituency by establishing a system of branches, or Chapters as they are called, which have slowly augmented in number till last year they had seats in most of the principal cities in the Union, as follows. The figures attached to each indicate the year of its accession to the Institute:

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| New York Chapter | March 19, 1867. |
| Philadelphia Chapter | November 14, 1869. |
| Chicago Chapter | December 13, 1869. |
| Cincinnati Chapter | February 14, 1870. |
| Boston Chapter | December 6, 1870. |
| Baltimore Chapter | January 13, 1871. |
| Albany Chapter | May 28, 1873. |
| Rhode Island Chapter | November 10, 1875. |
| San Francisco Chapter | November 4, 1881. |
| St. Louis Chapter | April 16, 1884. |
| Indianapolis Chapter | July 2, 1884. |
| Washington Chapter | September 21, 1887. |

The year of 1889 having been rendered memorable, in the history of the Institute, by the accession of the Western Association of Architects which had been formed five years previously on the general lines already laid down by the Institute, and on the same theory as that which induced the adoption of the chapter system, namely, that a beneficent oversight of the elements affecting the profession could better be had for local purposes by a local body than by one having its seat at a distance), it is probable that the reports submitted at the approaching convention in the national capital will show a large increase in the list of Chapters, with also, it may reasonably be hoped, many evidences of accomplished improvements in working methods, and suggestions for still further ameliorative processes in the interest of good architecture and of its practitioners, as well as of still closer union than heretofore among all the architectural associations of the country, under the federative system offered by the Institute.

The labor involved in the formating processes of the Institute was great, and equally so the work of correspondence, stimulation, coördination and general administration; the more so as it has been without endowment, while its income from initiation and annual dues has been insufficient even to cover proper expenditure for mere clerical service, for rent and for the printing—to say nothing of the editing—of its proceedings. Until the current year, when the membership, nearly doubled by the accession of the Western Association of Architects, seemed to justify increased appropriations, its secretary (whose whole time would, unassisted, be insufficient to meet its demands thoroughly) has had no salary whatever, though an attempt was made, when Mr. Pfeiffer was in office, to raise a salary for an assistant secretary. The excessive demands on the secretary may be inferred from the fact that with but two presidents in the first thirty years of its corporate existence, namely, the late Mr. Richard Upjohn, architect of Trinity and St. Thomas' churches, in New York, for nineteen years, from its incorporation in 1857 till his resignation in 1876, and his successor, Dr. Thomas U. Walter, architect of the capitol at Washington for eleven years, till his decease three years ago; and with but three treasurers in thirty-two years, namely, the late Mr. J. C. Wells for three years, the late Mr. R. G. Hatfield, author of "Transverse Strains," for nineteen years, and his brother, Mr. O. P. Hatfield, for ten years, the Institute during the thirty-two years named has been obliged to call successively on no less than thirteen among its most prominent, active and public spirited members. The first secretary of the Institute—as also the most active agent in promoting its formation—was, for nearly four years, Mr. R. M. Hunt, who was followed by Mr. Henry Van Brunt for five months, and for about half that time by Mr. J. W. Ritch. After the suspension caused by the civil war, and during the remaining portion of its first decade, or for about three years in all, the late Mr. Charles D. Gambrill, of the firm of Gambrill & (H. H.) Richardson, architects of Trinity Church, Boston, with complete faithfulness, and under much discouragement, performed its duties. For about four months during Mr. Gambrill's incumbency his title was limited to that of recording secretary, his partner being appointed corresponding secretary with special reference to foreign correspondence. This was done with the view of relieving Mr. Gambrill of the overwork, but the archives give no indication that this division of the office resulted otherwise than in all its work being done, as usual, by Mr. Gambrill. After the adoption of the Chapter system, with which the second decade in the history of the corporation opened, Mr. F. C. Withers, architect of the reredos in Trinity Church, New York, filled the office for a year, and was succeeded, also for a year, by Mr. Russell Sturgis, well known afterwards for the important and long, gratuitous service he performed for the Metropolitan Museum of Art, and now president of the Architectural League of the City of New York. After Mr. Sturgis, the secretaryship was successsvely filled by Mr. P. B. Wight, architect of the National Academy of Design in New York, and now of the Wight Fireproofing Company, for two years; by the late Carl Pfeiffer, architect of the Roosevelt Hospital in New York, two years; A. J. Bloor, four years; C. F. McKim, of the firm of McKim, Mead & White, one year; H. M. Congdon, architect of St. Andrews Church, Harlem, two years; A. J. Bloor, again, two years and a half; George C. Mason, Jr., three years and a half; and, for the third time, A. J. Bloor, three years. Mr. Gambrill, in 1878, was a second time elected, but declined. Prof. W. R. Ware, now at the head of the Architectural Department of Columbia College, was elected when, after my sixth annual term, I positively refused a reëlection; but I was compelled to retain the office for over half a year longer, till my physicians insisted on my resigning and going abroad, because Mr. Ware as positively declined to serve in an unpaid, onerous and often thankless position, which would have compelled him to forego, or partially neglect, his chosen and very important responsibilities in the field of instruction.

The presidency has been filled since Dr. Walter's death by the well-known R. M. Hunt; and, since last November, J. W. Root, of the firm of Burnham & Root, architects of "The Rookery," in Chicago, has been secretary, and Samuel A. Treat, treasurer.

Until the accession of the Western Association of Architects last November—resulting from the action of a joint committee of that body and of the Institute, appointed two years previously to consider the question of consolidation, and succeeded the following year by another like committee—the Institute was administered by a board of trustees, elected annually, and consisting of the president, secretary and treasurer, and a few other prominent members, to whom, after the third convention in 1869, was added a secretary for foreign correspondence, the first incumbent of which office, the late Henry A. Sims, of Philadelphia, greatly distinguished himself in it. After the fourth convention, in 1870, the presidents of the Chapters were added to the board. But at the "consolidation" convention of last year, a change occurred in both the terminology and the regimen of the administrative body, the title being changed to "Board of Directors," and an Excutive Committee, elected by the board from its own membership, being charged with the details of the administration. The Executive Committee for the current year consists of Messrs. E. H. Kendall, D. Adler, R. W. Gibson, and W. W. Carlin, with (ex-officio) the president, secretary and treasurer.

Until last year the Institute had standing committees on education and publications, the successive proceedings of the Institute being published under the auspices of the latter, and the former still surviving as a special committee, its membership for the current year comprising Professors Russell Sturgis, W. R. Ware, N. C. Ricker and T. M. Clark. An equivalent of the old Special Committee on Professional Practice, which for so many years did such good service generally under the chairmanship of Mr. W. R. Ware, is again on the Institute list under the name of Committee on Code of Professional Ethics, with Mr. L. H. Sullivan as chairman. The other special committees shown in the consolidation proceedings are on Clerk of the Works, R. W. Gibson, chairman; Chapters, J. F. Alexander, chairman; Competitions, C. E. Illsley, chairman; Railroad Transportation, also Mr. Illsley chairman; and Uniform Contract, O. P. Hatfield, chairman.

In the first decade of its existence the Institute had a number of annual dinners, held on Washington's birthday, but of these no record appears to be extant, except, perhaps, in the pages of two long-lapsed serials—one, the Artist Durand's *Crayon*, and the other the *Architects' and Mechanics' Journal*, published shortly before the civil war, for a short time, in New York. But its convention for business purposes did not, at that time, occur regularly. Since the organization of the Chapter system in 1867, however, the Institute has never failed to hold an annual convention. Seven of them have been held in New York, three in Philadelphia, two in Boston, three in Cincinnati, two in Chicago, one in Baltimore, one in Washington, one in Providence and Newport, one in Albany, one in Nashville, and one in Buffalo, all the places of meeting, except the last two, being the seats of Chapters.

The proceedings of all the conventions (edited, as a rule, by the secretary in office at the time, though in one instance by Mr. Littell, and in another by Mr. T. M. Clark) have been published in handsome pamphlet form; several of the later ones being illustrated with portraits of distinguished members of the organization. They give generally quite full accounts of the transactions at the conventions, including the reports of the trustees, Chapters and standing and special committees, with the discussions thereon, as well as papers written by members and read thereat, or in the Chapters, and the addresses made by officers and by distinguished laymen. Among the latter may be mentioned the names (in the chronological order of their contributions) of E. L. Godkin, of the *Nation*; the Rev. Dr. Furness; President Eliot, of Harvard; Hon. Rufus King; the late Rev. Drs. Osgood and Magoon; J. H. B. Latrobe (son of one of the original architects of the National Capitol); T. A. Atchison, M. D., and Hon. E. C. Sprague.

Papers of members of the Institute, published in the proceedings, include, among others, essays on iron and fireproof construction, by the late R. G. Hatfield, P. B. Wight, G. B. Post, A. J. Bloor, N. H. Hutton, F. Schumann and the late D. Lienau; on building soils, foundations, heavy buildings, masonry, concretes and mortars, terra-cotta, special minor instructions, etc., by the late J. T. Sturgis, N. H. Hutton, the late A. C. Nash, F. Baumann, E. T. Potter, W. L. B. Jenney and R. W. Gibson; and on Colonial, American or government architecture, by the late President Upjohn, J. L. Smithmeyer, P. B. Wight, President Hunt, A. Cluss, R. S. Peabody, C. A. Cummings, W. A. Potter, H. M. Congdon, J. Moser, M. F. Bell and George C. Mason, Jr. Acoustics and sanitary subjects, including the questions of heating, ventilation, sewerage and plumbing, have been treated by A. Cluss, the late H. R. Searle, the late C. Pfeiffer, Col. G. E. Waring, T. M. Clark, L. W. Weeds, the late R. Briggs, — Tudor and Glenn Brown. C. C. Haight, J. H. Hopkins, R. S. Peabody and C. A. Cummings have furnished papers on church architecture. The subjects of apartment and tenement houses have produced papers respectively from the late J. R. Niernsee and A. J. Bloor. D. Adler (architect, with his partner, Mr. Sullivan, of the Auditorium in Chicago) has a paper on the theaters; J. C. Cady (architect of the Metropolitan Opera House in New York), one on opera houses; J. L.

Smithmeyer (architect, with his partner, Mr. Pelz, of the Congressional Library), one on library buildings; G. A. Frederick, one on dining rooms; and J. H. McNamara, one on domes and towers. Specialists in the esthetics of architecture have furnished to the columns of the proceedings the following papers: "Technical Proportion," by D. T. Atwood; "A New Style," by A. F. Oakey; "Painting and Sculpture," by Prof. C. E. Norton; "Wall and Window Decoration, etc.," by A. J. Bloor; and "The Harmony Between Colors and Music," by E. G. Lind. Legal, ethical, protective and educational questions, involved in architectural study and practice, have elicited papers from the late R. G. Hatfield, T. M. Clark, Professor Watson, the late A. C. Nash, J. A. Fox, T. M. Clark, C. A. Ham, J. W. Wilson, G. A. Frederick and J. W. Yost; while historical and archæological papers have been supplied by J. T. Clarke and W. W. Boyington. The subject of building laws, applicable to this country, has been treated by E. Anderson, A. Stone, T. M. Clark and G. A. Frederick, and has been vigorously treated by a number of the Chapters in their relations with their several governments, to the great benefit of both the public and the profession. "Architectural and other Art Societies, etc." and "Landscape Treatment, etc." are by A. J. Bloor, and "Suggestions Toward the Best




and Speediest Methods for Harmonizing and Utilizing all the Architectural Societies in the United States" was furnished by D. H. Burnham, in response to a circular letter of my own to the members of the Institute, furnishing that title and requesting answers to the questions implied in it. One of the latest proceedings includes a sketch of the professional life of one of the founders of the Institute, but still active in practice, Mr. J. Renwick; and among the proceedings issued are memoirs of the late President Upjohn, and one by George C. Mason, Jr., of the late President Walter. The demise of any member has always called forth suitable minutes, which have been duly recorded and published.

Succeeding a number of praiseworthy efforts to supply a literary and illustrative organ for the profession, in this country, by members of the Institute and others, of which mention is made in my centennial address before the Institute in 1876, the Institute, after much correspondence for a number of years with various publishers, made such arrangement with a Boston firm as resulted in the establishment, that year of the *American Architect and Building News*, a weekly which has, notwithstanding some mistakes, done much good for American architecture and its practitioners. Its pioneering footsteps have, with results proportioned to the talent, faithfulness and means invested in each, been followed by a number of other serials, of which I recall at this moment *Architecture and Building*, a weekly, of New York; the *Building Budget* and The Inland Architect, both monthlies, of Chicago; the *California Architect* and *Technology Architectural Review*, of Boston, the last being of special value to students and young practitioners.

At its foundation, the Institute issued a schedule for the guidance of practitioners in their relations with their clients, including the charges which reputable architects in Europe—in their practice since early in the last century—had laid down as minimum fees. This schedule was slightly amended some years after, and in 1884 was slightly amended and somewhat enlarged, so as to include some explanatory sections. In this final form the Institute schedule has been adopted, I believe, by every architectural fraternity in the country; and equal discretion has been shown in the adoption substantially, and as far as consistent with narrower fields and responsibilities, of the Institute's constitution and by-laws. The demand for the Institute schedule has always been very large, both among members and outside practitioners, and the instances are beyond computation in which the present writer has been assured, especially by the younger class of architects, that complications have been smoothed away and occasionally lawsuits avoided by producing it. It has, indeed, frequently and successfully been appealed to in the courts in the interests of architects suing or being sued. In this connection it is to be added that the opinion of its officers and trustees on disputed points of practice has been called for, not only as a common occurrence by private practitioners, but occasionally by important corporations, and in one instance by the government of the United States.

It is patent to all unprejudiced observers of the growth of fine architecture and of the professional and social status of its practitioners in this country during the last thirty years, that by far the most potent factor thereto has been the Institute; and its influence on public-spirited laymen of artistic cultivation or tastes has already reacted generously for the benefit of the profession. Unless it be the prix de Rome of the École des Beaux Arts, there is not, so far as my knowledge goes, either in this country or in Europe, any prize more tempting to the student of architecture, and more provocative of the putting forth of his best powers, than the "Rotch Traveling Scholarship," administered by the Boston Chapter, and founded by the heirs of Benjamin R. Rotch (the father of a Boston practitioner and Fellow of the Institute, Mr. Arthur Rotch), in pursuance of his expressed munificent intentions. Its income of two thousand dollars supports two students for two years in their travels in Europe. In this connection must be noted the recent very handsome gift, for a similar object, to the Architectural Department of Columbia College of $20,000 by Mr. C. F. McKim, Fellow of the Institute and member of its New York Chapter. Still more recently Mr. and Mrs. S. B. Avery have, in the name of their son, O. P. Avery, a member of the Institute and its New York Chapter, who died last April, given to Columbia the latter's fine collection of architectural books, valued at many thousand dollars, with a fund, payable in two installments, of $30,000 additional for its maintenance, and the purchase of new books.

Mr. F. A. Schermerhorn, a trustee of the College, has for a number of years been a munificent donor to its Architectural Department, his latest gift providing for an income of $13,000 each alternate year. The Metropolitan Museum of Art of New York is now being enriched, under the commissionership of three members of the local Chapter, with an Architectural Department, the fruits of the influence of Messrs. N. and P. L. Le Brun, Fellows of the Institute, on a generous lover of architecture, Mr. Levi Have Willard, who bequeathed some $80,000 for that object, with strict instructions as to the fulfillment of his wishes in the matter and manner of selection. The Philadelphia Chapter, too, has recently, through the influence of Mr. T. P. Chandler, Jr., been made the administrators of a fund of about $20,000, to be used, after a period for the accruing of interest, in behalf of the art and the profession.

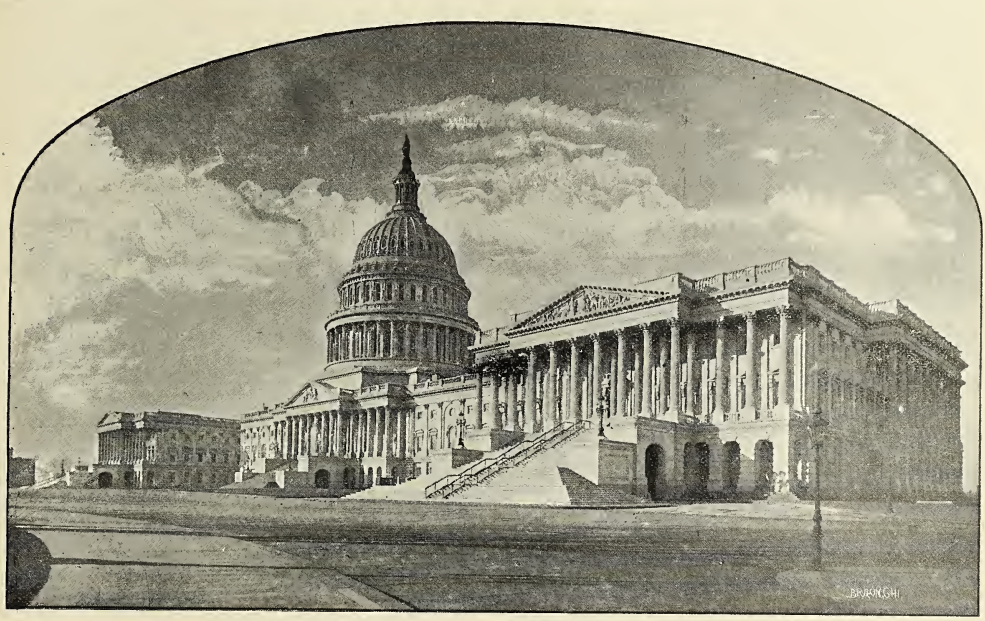
It may be noted, too, that the best known of the architectural departments attached to the universities, or other institutions of the higher culture, have been inaugurated, and for many years conducted by members of the American Institute of Architects, e. g., those of the Massachusetts Institute of Technology and Columbia College, by Prof. W. R. Ware, of Cornell, by Prof. C. Babcock, and of the Illinois University, by Prof. N. C. Ricker. Recently, too, a similar department has been added to the curriculum of the University of Pennsylvania, under the auspices of the Philadelphia Chapter of the Institute.

Col. H. T. Auchmuty, who has done so much with the training schools he established years ago at his own expense for the proper education — denied them by the internal administration of so many of the building trades — of American artizans connected with the building arts, was, it may also be noted, the pupil and afterwards the sometime partner of the Nestor of the profession, Mr. James Renwick, architect of the new Roman Catholic cathedral in New York.

The foregoing sketch, however hastily put together, is, perhaps, sufficient to give an idea of the work that has from the beginning been attempted by the Institute, and it may also, perhaps, suggest that, if it has not yet succeeded in all its aims, the fault lies more with the profession at large than with its administrators. There are, it is true, very few practitioners of the highest reputation who are not within its ranks, and those who are, whether filling its offices or not, of course greatly add to its prestige and influence, besides supplying their proportion of the sinews of war (and, of late, more than their proportion, through the fraternal efforts of a special committee, and especially of its chairman, Mr. H. Hudson Holly, to indemnify to some extent an officer who has subtracted in its behalf too much of time and strength from his personal interests); but there remains outside of it very many architects, eligible as respects professional competency and their desire to pursue their profession honorably, whose votes and dues would count for just as much as the most noted of the fraternity, but whose overmodesty — *adolescentum verecundum esse docet*, but not too much so — prevents them from becoming candidates for admission, or whose lack of *esprit de corps* and liberal feeling induces them to prefer "getting something for nothing" out of the guardian of their professional interests.

In a historical sketch, however meager, mention must be made of a fire, occurring in 1883, in which some of the oldest archives of the Institute were lost. Since then, its quarters, together with those rented by its New York Chapter and containing the valuable library belonging to the latter, have been successively in two fireproof buildings. Its original Constitution and By-laws on parchment were, however, preserved, with the names of the architects who were the original signers thereof.

The late president, Thomas U. Walter, A.M., Ph.D., LL.D., F.A.I.A., said: "The improved and improving condition of architecture in America, by which its standing as a fine art is developed, its field of design expanded, and its power to elevate and purify the public taste made manifest, is the result, directly or indirectly, of the labors and influence of the American Institute of Architects."



PHOTOGRAPHED BY J. W. TAYLOR, CHICAGO.

## Second Annual Convention of the American Institute of Architects.

TRANSCRIBED FROM THE REPORT OF THE OFFICIAL STENOGRAPHER.

THE second annual convention of the new American Institute of Architects came to order in the hall of the Arlington Hotel at Washington, at 4 o'clock on Wednesday, October 22. First Vice-President William Worth Carlin, of Buffalo, in the chair.

The roll was called by Secretary John W. Root, the following being the names of those attending the convention during its sessions:

W. G. Preston, Boston; E. G. Lind, Atlanta, Ga.; W. W. Carlin, Buffalo; William C. Smith, Nashville, Tenn.; H. L. Gay, Chicago; John W. Root, Chicago; Augustus Eichhorn, Orange, N. J.; Cyrus K. Porter, Buffalo; W. M. Poindexter, Washington, D. C.; Merritt J. Reid, Evansville, Ind.; M. J. Dimmock, Richmond; W. L. Plack, Philadelphia; C. F. Schweinfurth, Cleveland, Ohio; G. H. Helmle, Springfield, Ill.; F. Baumann, Chicago; E. T. Littell, New York; H. H. Linthwaite, Columbus, Ohio; Warren R. Briggs, Bridgeport, Conn.; A. J. Bloor, New York; E. H. Kendall, New York; Thomas Nolan, Rochester; O. K. Foote, Rochester; N. J. Clayton, Galveston, Tex.; C. A. Wallingford, St. Paul; Glenn Brown, Washington, D. C.; James Murphy, Providence; S. Huckel, Jr., Philadelphia; Otto Block, Rochester; Bernard Vonnegut, Indianapolis; S. S. Godley, Cincinnati, Ohio; C. A. Didden, Washington, D. C.; George C. Mason, Jr., Philadelphia; S. C. Earle, Worcester, Mass.; John H. Coxhead, St. Paul, Minn.; Alfred C. Clas, Milwaukee; Gustave W. Drach, Cincinnati; R. C. McLean, Editor INLAND ARCHITECT, Chicago; G. B. Ferry, Milwaukee; S. M. Randolph, Chicago; F. W. Humble, Buffalo; R. M. Upjohn, N. Y.; H. J. Meier, Detroit; E. W. Arnold, Detroit; A. B. Cram, Detroit; R. T. Grow, N. Y.; Robert Stead, Washington, D. C.; J. S. Rogers, Jr., Detroit; William Martin Aiken, Cincinnati; J. L. Smithmeyer, Washington, D. C.; J. G. Hill, Washington, D. C.; C. M. Bartlerger, Pittsburg; Julian Barnes, Joliet, Ill.; L. T. Scofield, Cleveland; G. W. Kramer, Akron, Ohio; Samuel Hannaford, Cincinnati; N. Le Brun, New York; Thomas Lemos, New York; Sidney G. Osgood, Grand Rapids, Mich.; W. W. Clay, Chicago; J. Blaby, Palmyra, New York; J. Appleton Wilson, Baltimore; J. H. Pierce, Elmira, New York; J. B. Noel Wyatt, Baltimore; Theodore C. Kink, St. Louis, Mo.; W. T. Eames, St. Louis, Mo.; A. F. Rosenheim, St. Louis, Mo.; H. C. Koch, Milwaukee; E. F. Fassett, Kansas City; James W. McLaughlin, Cincinnati; C. A. Curtin, Louisville, Ky.; J. W. Yost, Columbus, Ohio; C. Crapsey, Cincinnati; John H. Boll, Cincinnati, W. R. Brown, Cincinnati; Edward I. Nickerson, Providence, R. I.; A. P. Cutting, Worcester, Mass.; C. O. Arey, Cleveland; F. A. Wright, New York; S. A. Treat, Chicago; George W. Baxter, Jr., Syracuse, N. Y.; J. H. Kirby, Syracuse, N. Y.; T. M. Clark, Boston; Luther Peters, Dayton, Ohio; Fred H. Gouge, Utica, N. Y.; R. W. Gibson, New York; E. T. Carr, Leavenworth, Kan.; A. C. Bruce, Atlanta, Ga.; C. C. Burke, Memphis, Tenn.; S. M. Patton, Chattanooga, Tenn.; Frank M. Day, Philadelphia; Charles I. Williams, Dayton, Ohio; C. Powell Karr, New York; Jay Fay, Rochester, N. Y.; George A. Frederick, Baltimore; S. V. Shipman, Chicago; D. Adler, Chicago; George H. Smith, Cleveland, Ohio; John Eisenmann, Cleveland, Ohio; C. H. Owsley, Youngstown, Ohio; George W. Thompson, Nashville, Tenn.; Arthur Rotch, Boston; Alfred Stone, Providence, R. I.; W. G. Thompson, New York; J. Riely Gordon, Texas.

The President: I take pleasure in presenting to you the Hon. John W. Douglass, president of the Board of Commissioners of the District of Columbia, who will make you a short address of welcome. (Applause.)

Mr. Douglass then addressed the convention as follows:

ADDRESS OF WELCOME.

GENTLEMEN OF THE AMERICAN INSTITUTE OF ARCHITECTS,—I am here to greet you on behalf of the good people of this city and district, and if I could design an address of welcome as admirable in proportion and grace as any of you could do in your professional domain, I should hope to awake famous some morning and find this little speech a classic.

The men through whose genius and studious labors the race is safely and commodiously housed, and its taste for elegance and symmetry gratified, both in domestic and public architecture, can never fail to inspire the respect and engage the admiring attention of the civilized world.

The wonders of the past in stone and brick show how soon the necessities and higher aspirations of mankind were met and gratified by the early—possibly the prehistoric—architect.

Just think! But for that primitive genius in wood or stone who first designed a roof, how much of comfort we might have missed, how much of quiet happiness from the pattering raindrop, not to mention the consequent myriad escapes from rheumatism and pneumonias!

Somebody has defined architecture as "frozen music," and the western genius who designed the Minnesota Ice Palace for the first time, certainly on this continent, put into the concrete what theretofore was merely a European ideal.

In our city and district your practiced eye will discover, I trust, much to admire in the various styles of public and private structures; and, if I am not mistaken, there are before me now several of your distinguished body whose talent and taste have materially helped to adorn the city and make the nation proud of its capital.

A few weeks ago, on an occasion not unlike this, I gave a few statistics in regard to the material progress of our city. While I had them in my mind in a general way, my friend of the press has just handed them to me in printed form. This is another evidence of the inestimable value of the daily press. During the past ten years permits for 17,733 new buildings have been issued, representing a valuation of $43,133,843. These buildings, if placed in contact, would solidly cover an area of nearly one and one-half square miles. During that period the average annual increase in the number of buildings erected has been over twenty per cent, and the average annual increase on the value of new houses about thirty-three and one-half per cent. Another gratifying fact revealed by the records, is that the average cost of buildings erected in 1890 was more than forty per cent greater than the cost of buildings erected in 1880, which is conclusive evidence of the marked and constant improvement in the character of the houses erected.

Now, gentlemen, as architecture is a derivative of the Latin and Greek words meaning master-workman, it becomes a layman to be modest and brief in the presence of so many masters. Suiting myself to the thought, I will simply say that we are very glad to have you here, individually as well as an association.

The President: I am very sorry to have to announce that our President, R. M. Hunt, is confined to his room at Asheville, North Carolina, and will not be able to be with you; but he has sent on his address which he had prepared to deliver here, with the request that Mr. Kendall read it for him. We will now listen to the address of Mr. Hunt.

PRESIDENT'S ADDRESS.

GENTLEMEN AND COLLEAGUES,—This, our first convention since the consolidation of the Western Association of Architects and the American Institute of Architects, could not be held in a more appropriate place than in this the capital city of the nation; representatives as we are from all parts of the country. Our

satisfaction in meeting here is increased by finding about us many of the most important works of the late president of the Institute, Thomas U. Walter. They show careful study, and are characterized by dignity and repose, strikingly in contrast with much in their surroundings. After running the gauntlet of every style of building to be found in this metropolis, one enjoys a certain feeling of rest while contemplating his work. We must regret that while the nation has thus just reason to be proud of it, congress remains indifferent to the appeal of Mr. Walter's family for just remuneration for the faithful services his work represents.

When speaking of our national buildings, I cannot avoid referring once more to the methods employed by our government in their erection. Millions are appropriated every year for new court houses, post offices and custom houses, to be constructed in various parts of this great country, besides which, large amounts are voted annually for repairs, alterations and additions to those already existing. With few exceptions, for the design and superintendence of all these vast and multifarious works, a single office, that of a bureau of the Treasury Department at Washington, is made responsible. When this bureau was established its organization sufficed for all the needs of the time, but the work now thrown upon it is far greater than it was then expected to be or than it was adapted to undertake. It is to be considered, also, that the nation was then but little interested in architectural art; whereas to-day, the numerous followers of our profession furnish proof of higher attainment, and are the natural consequence of the rising demand and more advanced standard which the American public has since reached. While we should perhaps be thankful that the work of the architectural office of the Treasury is generally as well done as it is, we must hold it preposterous to assume that any one person can do justice to the present requirements upon that office. The present arrangement being by no means an economical one, it is natural to attribute the perpetuation of it to political jobbery, or to an indifference toward matters of art But probably it is, in fact, more due to ignorance of the labor and acquired skill necessary to the production of creditable results in architecture.

Were the national buildings put in charge of well selected men, and the duties of the supervising architect restricted to a general supervision of them, it is but reasonable to assume that the government would be better and more economically served, as then the architect could personally give more thought to his design and more efficient superintendence to the working out of it. Incidentally to the result of a much better class of buildings, the advantage would also be gained that through a proper spirit of emulation in the profession, architectual art for all other purposes would be cultivated. It may be observed also that certain features of monumental art can be properly introduced only in public structures, and every opportunity should be availed of, both by the public and the profession, to encourage and to train members of the profession in this direction.

I am fully aware that I am treading on delicate ground, and that the difficulties that beset any change in this direction are very great, but I cannot refrain from again alluding to this matter as one of vital importance to our profession. The situation has often been discussed, and I would respectfully refer any who may wish to give it further consideration to the able report upon it submitted to our last convention.

The governments of most of the nations of Europe select an architect, either in competition or by appointment, for each and every public building, and in France every individual structure belonging to the nation, be it a building or a monument of whatsoever kind, has its appointed architect, who has charge of, and is held responsible for, all repairs, alterations, etc., that may be required; this architect acting under the general supervision of a superior bureau. These positions are eagerly sought after, highly prized, and are held by architects of prominence, whose assistants thus gain useful training and valuable information, fitting them in their turn to fill corresponding positions with credit to the nation. This arrangement has been in existence upwards of two centuries, and has been persisted in under every change, not only of administration, but of dynasty, as it surely would not have been if its results had not proved satisfactory.

The attention of our government has been called more than once to this important matter by the supervising architects in their reports, and you will be glad to learn that the unofficial suggestion of the present worthy incumbent, Mr. J. H. Windrim, namely, that the government buildings be set apart to competition to the Fellows of the American Institute of Architects, has been approved by your Executive Committee, who confidently trust that at no distant day the proper authorities will favorably consider this suggestion.

It is to be regretted that the "bill to establish a National Art Commission" to report on plans of public buildings, monuments and works of art has not yet passed by both houses of congress and been made a law. Let us not despair, however, but rather be moved to use all means in our power to bring about the desired result, and to insure legislation of a similar character in our state and municipal governments.

It is my painful duty to record the loss, by death, since our last meeting, of John McArthur, of Philadelphia, Pennsylvania; Edward Sidell, of Birmingham, Alabama; D. A. Bohlen, of Indianapolis, Indiana; Henry O. Avery, of New York; H. G. Chisholm, of Anniston, Alabama; E. Townsend Mix, of Milwaukee. All men of ability for whom the Institute mourns.

In the death of Mr. McArthur, the Institute loses one of its oldest friends and staunchest supporters, who during nearly a quarter of a century showed untiring zeal in promoting its interests. A clever man, of genial disposition, who was endeared to us all, his numerous structures testify to his ability, and in his crowning work, the City Hall of Philadelphia, he has left a monument of his genius.

The Institute has sustained a great loss in the death of Henry Ogden Avery. Mr. Avery was thoroughly trained in his profession, commencing his studies at the Cooper Institute in New York and finishing them at the Ecolé des Beaux Arts, Paris. He was a zealous worker in various art societies, and one of the founders of the Architectural League of New York, which is doing so much to interest and educate the public in architectural taste. Modest and unassuming, he was earnest in his endeavors to advance the cause of architecture and art in general. During his short professional career he gave proof of great ability, and much was rightly expected of him. Such men the profession can ill afford to lose.

Those who consider it a privilege, as well as a duty, to attend these conventions will appreciate how much is gained to us in fellowship. It is personal acquaintance with each other, out of which has grown that mutual respect and esteem within the profession, without which we cannot expect its due appreciation from the general public. Besides our individual gains in various professional ways, growing out of the varied practice of the profession in different parts of the country, we are gainers as a body, in that our earnest endeavors to lift the standing of the profession tends toward a higher recognition of it by the public. Much has already been accomplished in this direction, but we must not cease our efforts until our art holds that high position to which it is entitled. Let us ever bear in mind, each one of us, that individual success in our calling lifts the position of the profession generally, and that the elevation of the profession is a gain to each one of us individually. Every conscientious practitioner must feel that to attain any degree of success necessitates a life-long struggle, the requirements of the profession, both scientific and artistic, being so numerous, so varied and so subtle, that they can only be appreciated by those engaged in them. For my part, and I venture to say that I express the sentiments of those who have been fortunate to stand in admiration before the chefs d'ouvres of the old world, I confess to a sense of despondency at my own efforts, and it is only when I reflect how comparatively few really admirable structures there are in the world, that a faint spark of hope gives me courage to try once more.

It may be interesting here to note some of the artistic difficulties the profession has to contend with.

Unlike any other of the fine arts, architecture has a practical side which renders it doubly difficult and complex. Painting and sculpture are, so to speak, *direct* imitators of nature, while architecture, likewise music, are *indirect* imitators of nature, in that without copying it they both aim to produce certain impressions on the mind that nature does.

Again, the architect does not select either his time or his subject. He must be ready at a moment's notice to carry out the schemes of others; nor in designing is he in reality ever before his work, as are the painter and the sculptor. The interpretation, too, of his geometrical drawings, which are a necessity, requires a special training far more thorough, though few are able to realize the fact, than is required to understand music from reading musical notes. In fact, it is only after long practice and considerable experience that any one learns to realize the true effect that architectural design as represented by drawings will produce when executed.

Again, from first to last the architect's work is carried out by other hands than his own. He must therefore be conversant with many branches of art and industry necessarily employed before his intentions can be realized, and after all, in spite of detailed drawings, reiterated minute instructions and the most careful supervision, it is rare, as you all know, that the ultimate result is entirely satisfactory to himself.

Looking constantly to the continued improvement of our art, both in design and construction, we note with pleasure that quite a new impetus is being given to the use of terra-cotta, but as, in this material, ornamentation can be produced at comparatively small cost, caution must be urged to guard against the too profuse introduction of ornament, so detrimental to any work of art.

During the past year great additions have been made to the Willard Collection of Architectural Casts and Models, in the Metropolitan Museum of Art in New York, a great boon to the professional man, the student and to the general public.

Continued praise is due to the management of our Architectural and Technological Schools, which now compare favorably with those in Europe. The architectural student is not now obliged, as heretofore, to go abroad for his technical education, and, thanks to the generosity of Mr. Arthur Rotch, of Boston, and Mr. Charles F. McKim, of New York, two Traveling Fellowships have been founded, the fortunate possessors of which are enabled to perfect themselves in their artistic training through study of the best work in the Old World. It is, perhaps, desirable that I should here state that unless the student be conversant with office work, a couple of years can be spent to advantage in an architect's office after graduating from Technological and Art Schools before going abroad.

The great success of the Training Schools established and supported by our old associate Col. R. T. Auchmuty, of New York, for the education of American citizens in useful arts connecting with building affairs, is a matter of much congratulation to our profession.

The Architectural Department of Columbia College has been enriched by the generous gift of Mr. F. A. Schermerhorn, which provides for an income of $1,300 each alternate year. And by the munificent gift of Mr. G. P. Avery of the valuable library of his son, H. O. Avery, together with a fund of $30,000 for its maintenance and the purchase of new books; while an Architectural Department has been added to the curriculum of the University of Pennsylvania, under the auspices of the Philadelphia Chapter, which has been made the administrator of a fund of about $20,000 to be used in behalf of our art.

In this country, for every dollar that is expended on all the sister arts, tens of thousands are spent on architecture and building. In order that architects may be more generally employed, we need to have always a serious sense of our great responsibilities. We should be most conscientious in our endeavors to faithfully serve the interest of our clients to the best of our ability; to do so even should it at times be necessary to sacrifice some of our artistic preferences. As trustees we should carefully avoid incurring any useless expense, and we should do all in our power to rightfully gain confidence and well deserved esteem from our clients. We should satisfy them that any structure in experienced hands can be given an architectural excellence without necessarily increasing its cost.

Petty jealousies among us should be studiously avoided as injurious to the profession. We should be careful to avoid speaking slightingly of one another's work and be just in our criticisms; never forgetful to give full, unstinted praise for good work wherever found, bearing in mind that meritorious work benefits the whole profession. The gratuitous offering of professional service should be avoided, for, like gratuitous advice, it is valued at its cost, and can only lower the standing of our profession.

A happy coincidence worthy of note is the incorporation of the Institute of Architects of New South Wales, Australia, in 1890, the year of our consolidation. You will be pleased to know that the president, Mr. J. Horbury Hunt, a Canadian by birth, was brought up in the office of Mr. E. C. Cabot, Boston, Massachusetts.

Mr. Hunt, in a private letter to me, expresses the hope that a strong bond of fellowship will unite the two societies, in which we most heartily concur.

During the past year seventeen Fellows have been elected.

Your Board of Directors have held two meetings, and four have been held by your Executive Committee.

The most important matter before the Executive Committee was that of the relation of the members of the Chapters to the Institute. The amendments agreed upon were as follows:

*First.* That the utmost encouragement should be given to the formation and continuance of the Chapters.

*Second.* That the precise geographical limits to be included under each Chapter were impossible to define.

*Third.* That every regular member of a Chapter should be a Fellow of the Institute, but that the Executive Committee were of the opinion that no objection could be made to the Chapters including two classes of members—regular and associate.

*Fourth.* That any five Fellows of the Institute might organize a Chapter under the Constitution and By-Laws and charter of the Institute.

The San Francisco Chapter has applied for a charter, with a membership of thirty-eight, but only four of these are members of the Institute.

Pittsburgh applies with a membership of nineteen, and only three are members of the Institute.

Therefore a number of Chapters have been unable to reorganize before this convention.

Reports from twenty-one of the twenty-eight Chapters have been received.

The Executive Committee has received a communication from C. A. Cummings, requesting the coöperation of the profession in aid of the Delphi excavations, and I announce with pleasure that Mr. Cummings has been asked to address the convention on this subject, of much interest to us all, and I doubt not that the convention will respond liberally to his appeal.

Other subjects of varied interest will be now submitted for your deliberations, to which I ask your earnest attention.

The President: The next order of business is the report of our treasurer for the past year.

TREASURER'S REPORT.

OFFICE OF TREASURER AMERICAN INSTITUTE OF ARCHITECTS,
CHICAGO, October 18, 1890.

*S. A. Treat, Treasurer, in account with the American Institute of Architects:*

DR.

| | |
|---|---|
| 1889—To balance in hands of treasurer Western Association | $404.49 |
| 1890—To balance from treasurer of the Institute of Architects | 88.92 |
| To royalty from sale of contract blanks | 42.95 |
| From initiation fees, dues, fines, etc. | 4,096.81 |
| | $4,633.17 |

CR.

| | |
|---|---|
| By cash as per accompanying vouchers | $3,028.13 |
| By balance in treasury | 1,605.04 |
| | $4,633.17 |

S. A. TREAT, Treasurer.

At the consolidation convention at Cincinnati a year ago there was considerable discussion as to the amount of dues necessary to meet the current expenses of the association. The year having been somewhat experimental, the treasurer has thought best to give a general statement of the receipts and disbursements during the year.

The principal expenditures are as follows:

| | |
|---|---|
| Salary of secretary | $1,500.00 |
| Stationery and printing for both secretary and treasurer | 586.46 |
| Traveling expenses of Executive Board | 432.00 |
| Rent of office in Wells Building, New York | 125.00 |

The remaining $384.67 is for minor items, as can be seen in detailed statement of the treasurer.

The receipts from dues and royalty during the year amount to $4,128.26, so that the excess of receipts is about $1,000. Respectfully submitted,

S. A. TREAT, Treasurer A. I. A.

The chair appointed an auditing committee consisting of Alfred Stone, of Providence, chairman; Cyrus K. Porter, of Buffalo, and Levi T. Scofield, of Cleveland.

On motion, the Chapter reports were received and referred to a committee for consideration and report, and the chair appointed as such committee Robert W. Gibson, of New York; Warren R. Briggs, of Bridgeport, and D. Adler, of Chicago.

The next order of business being the reading of reports of standing committees, the secretary read the following report of the Committee on Education:

REPORT OF COMMITTEE ON EDUCATION.

*John W. Root, Esq., Secretary American Institute Architects:*

DEAR SIR,—The Committee on Education will offer no report this year. Correspondence with the different members and conversation with Professor Ware since his return from a year's absence in Europe have failed to bring out any scheme or plan with reference to educational advance. One member of the committee has to propose the formation of a Chapter of the Institute in connection with each school of architecture in the country; but that seems to me not to come within our scope.

I inclose my resignation from the committee, to be used in case the ruling should be that the membership holds over. If the members go out with each new convention, the resignation will not be needed. Yours sincerely,

R. STURGIS.

*John W. Root, Esq., Secretary American Institute Architects:*

DEAR SIR,—A conversation I have had with Professor Ware, who has many reminiscences of the Committee on Education of the old American Institute of Architects, leads me to make the following suggestions:

The Institute has not a very close interest in the well-established schools which are turning out architects more or less well equipped. It cannot influence them very much. Its immediate interest is rather in the attempts to teach something, first, to practicing architects who may not be well-equipped, and second, to draftsmen and assistants.

The Committee on Education should, therefore, first, collect information about attempts made by small local societies of architects (Chapters, American Institute of Architects and others) and by individual architects, to provide instruction for beginners and others; and second, to spread such information and such suggestions as may seem valuable, among the architects of the whole country.

The committee should be composed, not of professors and regular teachers, but of such practicing architects as may have taken an interest in the voluntary study and teaching. There are many such and probably Professor Ware and others could supply the names of some of them.

Yours very sincerely,

RUSSELL STURGIS.

The report was laid on the table for future consideration, and the following report of the Committee on Code of Ethics was read by the secretary:

REPORT OF COMMITTEE ON CODE OF ETHICS.

Your committee begs to say that its report is, in the main, negative. Three years ago, at a convention of the Western Association of Architects, the suggestion of a code was discussed at some length, and the notion of formulating such a code seemed reasonable and timely. Conditions since then are much changed, and your committee no longer clearly sees its way. The uniting of the Western Association of Architects and the American Institute adds a serious complication, for the membership of this new association is coextensive with the area of the country, and thus includes modes of practice so diverse that the possibility of harmonizing them seems remote. Furthermore, methods of practice in the meantime in some localities have changed, the tendency alluded to inclining toward a business rather than a professional conduct of architecture. Whether this tendency is or is not a growing one is not yet clear, nor is it certain that such a policy is either sound or wholesome.

A third element of difficulty is furnished by the large number of young men who have in the interval entered in the "business," particularly in the West. These beginners feel that they must make headway and adapt the means to the end. We then have three elements: First—Those who follow time-honored methods, look askance at the new, and who are irritated and ruffled by any departure from what they regard as the strictly legitimate. Second—Those who are in architecture as a business, for whom business methods, therefore, suffice, and who look with contempt upon the older methods as lacking decision, promptness and versatility. Third—Those who are much more concerned in filling their bellies than in splitting hairs with nicety, and who look with cynicism on all methods, including their own. These three elements have representation in this Institute. The geographical area covered is immense, and each locality differs in its social characteristics and in the views and standards of its business community. Between him of social equipoise and professional dignity at the upper end of the scale and the hustling guerrilla at the lower are to be found all the transitional gradations.

It is not at all clear that one of these elements dominates the others; if one did dominate, the way to a code of some sort would be open. Of what utility, then, will be a code so general in its terms as to lack in application? Or, granted that one may be devised that satisfies in definition, what power has this Institute to enforce it and yet retain more than half of its numbers.

Your committee holds that a code of ethics lacks stability unless it have a sure foundation in the individual—that his views coincide heartily and in good faith with its terms. Your committee is not devoid of optimism and believes that in due time the varied interests and views now held in the profession will have coalesced and unified through a gradual series of modifications; but that these modifications must come about by actual experience tending to demonstrate and bring home the truth that the honorable way is the best way.

To this end the example of those most eminent in the profession, and most circumspect regarding the moral effect of their methods, will surely assist.

Your committee assumes that a code to which nominal or perfunctory assent is given would prove in reality worthless. It assumes also that the Institute having been liberal and kindly in the initial comprehensiveness of its numbers, shall not be harsh in its policy of government, but shall rather foster all that is good, however little or obscure, and nurture it through the years, by a wise and sympathetic encouragement—an encouragement devoid alike of patronage, of cant and of nonsense.

Your committee believes that this Institute, a body as yet crude in its substance and vague in its aims, should not, at its second convention, undertake a problem demanding for its solution so much of tact, of skill, and such unity of sentiment as does this one. Your committee is convinced that such a code should be, like a written contract, merely a permanent and legible record of that which has been thoroughly examined, well understood, and completely agreed upon.

Your committee therefore respectfully declines to submit a definite code of ethics, but yet emphatically recommends that the topic be kept well and constantly in mind, to the end that when the proper moment shall have come, a code of ethics may appear and take such shape as to fully express what the individuals of this Institute believe rather than what they may choose to assume.

Respectfully submitted,

LOUIS H. SULLIVAN, Committee.

This report took the same course as the preceding, and the following report was read:

REPORT OF THE COMMITTEE ON THE EMPLOYMENT OF CLERKS OF WORKS AND SUPERINTENDENCE.

GENTLEMEN,—Your committee have the honor to report as follows:

This committee was appointed at the convention of 1888, to consider the feasibility of encouraging the employment of clerks of the works. At the convention of 1889, owing to the pressure of other matters, the committee simply reported progress, and was continued and enlarged by the consolidated Institute, and its scope extended to include the subject of superintendence generally.

In examining these questions your committee has, at the outset, recognized two points of view, one dealing with those things desirable in the abstract, and the other with so much as is immediately practicable, and which can be made to claim public recognition and acceptance.

It is almost superfluous to say that the latter is the one placed foremost. Beside this, the fact is to be remembered, that the Institute rules must be catholic and general; must be broad enough to include under the same regulations the architects of metropolitan cities and those of country towns. In large cities, especially in the East, there is a growing inclination to recognize that an architect is justly paid for constant and continuous superintendence, yet it will be many years before the same feeling is general, and before the Institute can attempt to demand the employment of assistant superintendence throughout the country.

It is encouraging to learn that in England, where this movement commenced much earlier than here, it has prospered; it has developed a new occupation. Men specially trained for the duties, at regularly recognized salaries, have become so numerous that they have in successful operation a society of their own, the Clerk of Works Association of Great Britain.

Not long ago a clerk of works was often a builder's foreman or an architectural assistant looking for more practical experience, either of which class might furnish very good men, in whom, however, there would necessarily be weaknesses.

Your committee is informed, too, that the employment of clerks of works in England is becoming quite customary, very few buildings of any importance being erected without one. There is every reason to believe that it will be so in America, and your committee are of opinion that the Institute can materially assist in hastening this result.

The first essential is a correct understanding of the situation by employers and clients.

Many employers think that they are really paying an architect enough to demand almost his constant attention. Most of them think that he should have at least a representative constantly at the work; and perhaps all of them believe, and in this they are supported to a surprising extent by legal opinion, that an architect is in the position of chief builder in the commercial and responsible sense, as well as the technical. And they put him in the position of the contracting party, with the real contractor as his employé or subordinate.

If this relationship were logically established and paid for at such rates of commission as it would demand—probably fourteen or seventeen per cent—it might have some advantages, but it would destroy the disinterested attitude of modern architects; and in any case it is not the real state of affairs with which we have to deal.

Your committee feel the desirability, therefore, of bringing to the notice of the public, and of their legal advisers, the existing facts:

*First.* That an architect offers and is paid for only a certain limited kind of superintendence.

*Second.* That it is to the interest of the employer in many cases to pay for constant detailed superintendence.

*Third.* That the architect is in no sense a contractor, nor is he responsible for the contractor's misdoings; and that the commissions usually paid would be utterly insufficient for any such services or responsibilities, even if desirable.

Your committee are further of the opinion that the best means of bringing these facts to the notice of employers are, for the present, the addition to the schedule of authorized charges of a clause stating the rates at which clerks of works will be applied. In other words it is advised that the employment of clerks of works should be assisted and encouraged by the announcement of regular rates as an extra to the schedule. The present clauses headed "Supervision of Works" and "Clerks of Works" might be amended, in order to define the superintendence of the architect, substantially as follows:

SUPERVISION OF WORKS.

"The architect will furnished general superintendence by himself or his deputy, of such frequency or duration as in his judgment will suffice or may be necessary to fully instruct the contractors, pass upon the merits of material and workmanship, and to maintain the effective working organization of the several contractors engaged upon the structure; and to enable him to decide when the successive installments or payments, provided for in the contract are due.

"He is to determine any constructive emergencies and order necessary changes, and define the true intent and meaning of the specifications; that he has authority to stop the progress of the work and order its removal when not in accordance with them."

"The architect will demand of the contractors the proper correction or remedying of all defects discovered in their work, and will assist the owner in enforcing the terms of the contract. But the architect's superintendence shall not include liability or responsibility for any breach of contract by the contractor."

CLERK OF WORKS.

"On buildings where it is deemed necessary to have constant supervision, the architect will, if authorized by the employer, appoint a clerk of the works for that purpose, at the extra rates quoted in the schedule or as agreed.

"The selection or dismissal of the clerk of the works is to be subject to the approval of the architect."

The schedule of charges should be amended by the addition of the following immediately after the 5th clause:

"The charge for clerk of the works, when constant supervision is required, will be at the rate of $30 per week for buildings costing more than $20,000 and less than $200,000 and at special rates, as agreed, for other buildings."

Your committee further recommend that, in order to assist architects individually, to define their relationship with clients in regard to superintendence, the Institute approve and print a form of contract between owner and architect.

A draft suggested for the said form of contract is submitted, as follows:

From....., architect,
to....., owner.
For a compensation of.....
the architect proposes to furnish preliminary sketches, contract working drawings and specifications, detail drawings and general superintendence of building operations and, also, to audit all accounts, for a.....
to be erected for .....
on .....

Terms of payment to be as follows:

One-fifth when the preliminary sketches are completed; three-tenths when the drawings and specifications are ready for letting contracts; one-fifth .....

The balance upon the completion of the building or .....

Terms of payment to be as follows:

One-fifth when the preliminary sketches are completed; three-tenths when the drawings and specifications are ready for letting contracts; one-fifth .....
Thereafter at the rate of.....per cent upon each certificate due to the contractor.....

If work upon the building is postponed or abandoned, the compensation for the work done by the architect is to bear such relation to the compensation for the entire work as determined by the published schedule of fees of the American Institute of Architects.

In all transactions between the owner and contractor, the architect is to act as the owner's agent, and his duties and liabilities in this connection are to be those of agent only.

A representative of the architect will make visits to the building for the purpose of general superintendence of such frequency and duration as, in the architect's judgment, will suffice, or may be necessary to fully instruct contractors, pass upon the merits of material and workmanship and maintain an effective working organization of the several contractors engaged upon the structure.

The architect will demand of the contractors proper correction and remedy of all defects discovered in their work, and will assist the owner in enforcing the terms of the contracts; but the architect's superintendence shall not include liability or responsibility for any breach of contract by the contractors.

The amount of the architect's compensation is to be reckoned upon the total cost of the building, including all stationary fixtures.

Drawings and specifications are instruments of service, and as such are to remain the property of the architect.

.....Architect.

Approved and accepted....., 1890.

....., owner.

It will be readily understood that such a contract is not universally applicable and that often there are cases where no contract can be obtained in writing. But this is the case in many other occupations where a printed form of proposal and acceptance is customary, and your committee are of opinion that it would, in very many instances, be of great service.

Many prominent architects have already used something of the kind for many years, and it is suggested that much greater force would be given it in the publishing of some such form by the Institute. Not only would such a contract define the position of the architect, and afford him protection in a special case where it was used, but its provisions, if in frequent use, would have great weight in any argument upon cases where no written contract existed.

It seems strange, in these days of carefully written agreements, there should be such frequent misunderstandings of the common relationship of architect and client.

In conclusion, your committee beg respectfully to point out that the proposed amendment of the schedule of charges is very slight, and in no sense revolutionary. The wording of the present clauses has been retained in the most conservative way. The suggested contract is an entirely distinct matter and may be considered separately.

No doubt many architects would follow this model, even if not printed by the Institute.

Your committee beg to acknowledge with thanks the receipt of valuable information from several members, and others, including H. D. Appleton, Esq., F. R. I. R. A.,the president of the Architectural Association of London, and Henry Jarvis, Jr., Esq., F. R. I. R. A. of London, and Mr. F. Dashwood, secretary of the Clerk of Works Association of Great Britain.

The form of agreement suggested is a revision of one which is in use by Messrs. Adler & Sullivan of Chicago.

Respectfully submitted,

(Signed) R. W. GIBSON, Chairman.

No reports were received from the Committee on Formation of Chapters, or the Committee on Competitions. That on Railroad Transportation reported as follows in a personal letter to the Secretary :

REPORT OF COMMITTEE ON RAILWAY TRANSPORTATION.

ST. LOUIS, October 18, 1890.

*Mr. John W. Root, Secretary American Institute of Architects.*

MY DEAR SIR,—Replying to your favor of 17th inst., about committee reports. I beg leave to remark that since actions are more vociferous than words, the rate of a single fare for the round trip from St. Louis to Washington seemed to me a sufficient report as to the business of the Railway Committee. I have only to add that the number of names which could be secured from points west of St. Louis was so nearly zero that the Western Association finally concluded to make no reduction west of St. Louis.

As to the Committee on the best mode of converting State Associations into Chapters of the A. I. A., I have had no communication from its chairman, and have been unable to devise any measure which would obviate all the difficulties which at present attend this subject. I fear we must wait for some of them to die out (the difficulties, I mean). Very respectfully,

C. E. ILLSLEY.

The following report of the Committee on Uniform Contracts was next read :

REPORT OF THE COMMITTEE ON UNIFORM CONTRACTS.

*To the American Institute of Architects :*

GENTLEMEN,—During the past year no action has been taken by this committee looking to the alteration of the present form of the Standard Uniform Contract, adopted by the Institute and by the National Association of Builders, as it was thought best to give the present form a fair trial, by extending its use throughout the country, and thus subjecting it to the experienced judgment of architects and builders generally. It is evident that to make a standard form of value, it is necessary for it to have a certain element of permanence, and that as few changes as possible should be made in its provisions. In a number of cases heard from, the use of the form by architects has been said to be satisfactory, and very few complaints have been made as to its working in general practice.

The only complaint of importance that has reached the committee is embraced in the following correspondence, which is here given at length in order that those using the form may be induced to assume all the powers fairly given to them by its provisions, and thus be able to fully defend the interests of the owner as against the unlawful encroachments of the builder.

CHICAGO, June 23, 1890.

*Mr. O. P. Hatfield, Chairman Committee on Uniform Contract :*

DEAR SIR,—The enclosed remarks on the "Standard Contract" have been sent to us by an architect, with the request that we "would call the attention of the Contract Committee to it." We herewith forward them to you.

Yours truly, INLAND PUBLISHING COMPANY.

CHICAGO, June 20, 1890.

GENTLEMEN,—As one who is very much interested in everything that will in any way better our condition and further the architectural interests of all, I note my experience with the uniform contract adopted by the Institute and National Builders' Association; I have experienced trouble in the following instances :

*First.* There are no provisions made for an architect's representative certifying to and taking action upon defective work during the absence of the architect, so that the matter cannot be referred to him. I am aware that where the duties of an architect are understood fully by the client or the public, this trouble may never happen.

*Second.* There are no provisions made empowering the representative of the architect in the absence of the owner and architect to stop the contractors when the work is unsatisfactory. He, or the architect himself, for that matter, can only issue a certificate to that effect to the owners, who alone can stop the contractor, thereby often causing a great deal of delay and the introduction of much defective work should the contractor desire to.

This clause cost one of my clients something like $5,000 on a contract.

Respectfully, * * *

*The Inland Publishing Co., Chicago, Ill.* NEW YORK, June 25, 1890.

GENTLEMEN,—Your letter of the 23rd inst. having reference to certain criticisms of the Standard Contract is received, with a copy of the letter to you from an architect making said criticisms. When a meeting of the committee is held, I will submit these with others to them for their consideration. In the meantime I would say as an answer to the points made :

*First.* That the architect referred to has not claimed all the power given him by the contract. Article 1 of said contract distinctly states that the Architect acts as *agent* of the owner, and Article 5 provides that the architect "and all persons appointed by the architect" is to be permitted to visit the work, and due facilities shall be provided to inspect the work. These articles give to the architect all the power that the owner is supposed to possess in the premises, and recognize the employment by the architect of deputies to perform the duties of the architect in his absence.

By Article 4 the architect is given the power to force the contractor to remove improper material and to take down defective work, virtually at once, but in any case within twenty-four hours after receiving a written notice to do so. This provision is absolute, and gives the architect full power to stop the work at any time.

The contingency contemplated in Article 12 is that of a general delinquency on the part of the contractor and gives the architect and owner a chance to get rid of an incompetent contractor altogether, and to substitute for him one that can carry out the contract in the manner provided by the plans and specifications.

The owner should not make a contract with an irresponsible man, if the contractor is responsible he can always get redress for any damage suffered by him through the infraction of any provision of the contract by the builder. It is evident that this 12th Article also operates to the advantage of the honest contractor, by disabling and disgracing the irresponsible underbidders in estimating competitions. Very truly yours, O. P. HATFIELD,

Chairman, Committee on Uniform Contract.

The committee are desirous of receiving suggestions for the improvement of the form of contract adopted by the Institute, so that when the proper time comes it may be amended, when it may be deemed wise to do so, after a careful consideration of the subject. The demand for the blank form continues to be liberal.

Respectfully submitted,

O. P. HATFIELD,
ALFRED STONE,
D. ADLER,
} Committee.

NEW YORK, October 10, 1890.

This report took the usual course and was followed by that of the Board of Directors :

REPORT OF THE BOARD OF DIRECTORS.

The first meeting of the board of directors was held in Cincinnati, November 21, 1889. The following gentlemen were elected as the Executive Committee : Messrs. E. H. Kendall, D. Adler, R. W. Gibson, W. W. Carlin; the officers of the Institute, namely: R. M. Hunt, president, John W. Root, secretary, and S. A. Treat, treasurer, being ex-officio members.

One of the first questions propounded to the board was the important one touching the relations of Chapters to the Institute; a subject which has been frequently discussed at subsequent meetings of the Executive Committee, and which will come before you for final solution.

At this meeting it was decided that a number of names be proposed as substitutes for those of the board of directors already elected, in case, for any reason, there should occur a declination of the position by anyone who had already been elected; and that the appointment of these substitutes should take place in the order of nomination. The following were the gentlemen nominated : Alfred Stone, Levi T. Schofield, W. M. Poindexter, J. W. Yost, E. C. Cabbott, G. W. Rapp, W. S. Wicks, N. S. Patton, W. G. Preston, A. J. Bloor, and E. I. Nickerson.

The schedule of charges before affirmed by the Institute and indorsed by the Western Association of Architects was reaffirmed, with instruction that across the face of some of the schedules the words "Issued to non-members of the Institute" be printed; these to be used by architects who were not Fellows in regular standing in the Institute. The word "minimum" was also ordered prefixed to the word "charges."

The Committee on Education not having been elected by the convention or appointed by the president, was appointed as follows : Russell Sturgis, chairman; W. R. Ware, Prof. N. Clifford Ricker, T. M. Clark. It was decided that the Executive Committee should hold quarterly meetings and such other meetings as might be necessary; and that if any member of the Executive Committee were unable to attend, and that such failure to attend would make it probable that a quorum would not be present, the secretary should notify a member of the Board of Directors to be present in his stead.

A form of ballot was adopted in conformity with that previously used by the Western Association of Architects, and instructions were given as to the method of its issuance.

During the year there have been four meetings of the Executive Committee held in New York, quorums being present at each meeting.

At the first meeting of the Executive Committee the question of the relations of Chapters to the Institute was at once raised for discussion. It was resolved : first, that the utmost encouragement should be given to the formation and continuance of Chapters; second, that the precise geographical limits to be included under each Chapter were impossible to define; third, that every regular member of a Chapter should be a Fellow of the Institute, and that the Executive Committee were of opinion that no objection could be made to a Chapter including two classes of members, regular and associate; fourth, that any five Fellows of the Institute might organize a Chapter under the constitution, by-laws and charter of the Institute. Following these resolutions, it was decided to obtain from the Fellows an informal ballot on a proposed amendment covering this point, to obtain a sense of their feeling before the convention of the Institute. This ballot resulted in a vote, nine-tenths of which was in favor of the amendments. The confirmation of these amendments or their rejection will occur at this convention. A committee of three was at this meeting appointed to act with a similar committee of the Association of Builders in the matter of uniform contracts. The names of the committee are : Mr. Hatfield of New York, Mr. Stone of Providence, Mr. Adler of Chicago.

At the second meeting, discussion was resumed on the question of Chapters, and it was decided that in the nature of the case, no resolutions touching Chapters could be retroactive, except with the consent of the Chapters. At this meeting an amendment was suggested by Mr. Hunt to the schedule of charges, suggesting that in the fourth clause the words "surveys and measurements," being misleading, should be omitted. This will be a subject to be raised before you at this convention. An important matter discussed at this meeting was the excavations at Delphi; a subject of great interest to all scholars throughout the world, and, at the time, of special interest to American architects. It is hoped that the matter will be presented at this convention by an address from Mr. C. A. Cummings, who is especially interested, and is especially well informed on this subject. The board has been instructed to make the subject a cause of special investigation among the Fellows, and has already issued circulars calling attention to the matter. Mr. Langford Warren, of Boston, appeared after the adjournment of the meeting, that is on the following Monday, and presented the subject of the excavations in a very impressive manner.

Communications have been received from Mr. Barwick, of the University of Toronto, calling attention to the disastrous fire which destroyed their library, and it is hoped that contributions of money and books may be received from this Institute. The secretary will, in a circular, address each of you in Mr. Barwick's behalf. A committee of seven has been requested from us to meet similar committees from the National Association of Fire Engineers and the National Association of Builders, to determine upon uniform building laws to operate throughout the country. And a communication was received, impressing upon us, on the part of the National Association of Builders, the importance of using a uniform contract. There have been elected during the year the following Fellows : A. B. Jennings, Milton See, C. W. Clark, T. C. Young, W. S. Eames, Kivas Tully, F. A. Wright, James Wahrenberger, Bruce Price, W. C. Winney, Elbridge Royden, J. B. Woodworth and E. B. Green.

The association has been called on to mourn the death of Messrs. John McArthur, R. Townsend Mix, Edward Sidell, D. A. Bohlen, Henry O. Avery, E. J. Chisholm.

In the last report of Mr. Windrim, supervising architect of the Treasury Department, a suggestion was made that the government buildings be open for competition to Fellows of this Institute. This suggestion is most heartily indorsed by the Board of Directors, who refer it to you in the earnest hope that you will give it your cordial indorsement as well.

The Board of Directors desire to call your attention to the following matters of importance :

*First.* The proposed amendments to the constitution, touching the subject of local Chapters in their relationship to the Institute.

*Second.* The proposed amendment to the schedule of charges.

*Third.* The addition to the schedule of charges of a clause determining a percentage fee for the making of measurements and surveys of materials, etc.

*Fourth.* An amendment creating a new officer of the Institute, in the person of an assistant secretary and treasurer.

A letter from Mr. Russell Sturgis in relation to the Standing Committee on Education, containing suggestions which, if they can be carried out, will have a valuable and lasting effect upon the Institute itself. Suggestions from so high a source as Mr. Sturgis cannot fail to command attention from you.

The President : If there is no objection, this report will take the same course as the preceding reports.

Mr. Adler : Mr. Chairman, in view of the fact that the burial of Mr. Mullet takes place tomorrow, would it not be well if some action were to be taken by the Institute, looking to a representation in some form in connection therewith. As there are many among us who were undoubtedly personally acquainted with Mr. Mullet, a resolution with reference to the matter would come with a better grace from one of those who were so acquainted with him rather than from myself, who never had the honor of his acquaintance.

Mr. Wallingford: Mr. Chairman, I beg to present the following resolution.

The resolution was read as follows:

*Resolved*, That it is with deep regret we learn of the death of our professional associate, A. B. Mullet, one of the former supervising architects of the government buildings, and we deeply sympathize with his family and friends.

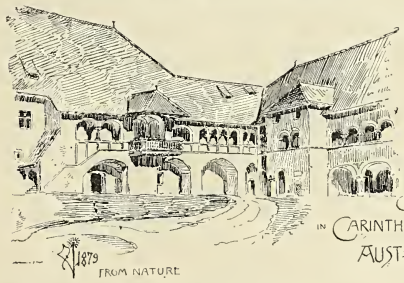
The period of his service extended over a time of the greatest prosperity, during which a large expenditure of public moneys was made. The improvements under his charge would at the rates of compensation usual in private practice have yielded to him a fortune; that the deceased was possessed of but limited means attests his integrity more than any words we might utter.

*Resolved*, That a copy of these resolutions be furnished the family of the deceased and to the daily and technical press.

Mr. Stone: Here is a gentleman who was not a member of the American Institute. We have had several deaths of men who are members of the American Institute, and distinguished members of the profession. It is a very delicate thing to oppose, but I trust that the convention will do nothing more than to ask that a committee be appointed to attend the services. We should not take up more time with this matter. I do not wish to be misunderstood, as this is a very delicate thing to oppose; but I do not think it is a proper thing for us to do. I therefore propose that a committee of one be appointed to represent this convention at the funeral services. The Free Masons have a committee of five only to go to Cincinnati. I move that a committee of three be appointed to represent the American Institute of Architects at the funeral.

The motion was carried and the convention adjourned to meet at 10 o'clock A.M.

## SECOND DAY—MORNING SESSION.




The session was called to order at 10.30 A. M. First Vice-President Carlin in the chair.

The report of the Bloor Indemnification Committee was presented by H. Hudson Holly, chairman, which took the usual course.

The Chair appointed A. J. Bloor, of New York, Samuel Hannaford, of Cincinnati, and Levi T. Scofield, of Cleveland, as committee to attend the funeral of A. B. Mullet.

The President: The secretary has a letter from Mr. Hunt which he will read to the convention.

The letter is as follows:

*John W. Root, Esq.* ASHEVILLE, N. C., October 20, 1890.

DEAR SIR,—I had arranged to be in Washington tomorrow, but was prevented by a severe cold, as I wrote you yesterday. I still expected to be with you on Wednesday, but today I must abandon all hope of so doing, having completely lost my voice; besides it would be folly to attempt the journey in my present condition.

I inclose a copy of my address, with the request that it be read by Mr. E. H. Kendall, of New York, should he be present.

Begging you to express my sincere regret at my being unable to be present at the convention, I remain fraternally yours,

R. M. HUNT.

P. S.—I inclose a letter just received from Mr. E. T. Carr.

The Secretary: There were one or two inclosures mentioned in Mr. Hunt's letter, which will be read at your pleasure. At a suggestion made to me yesterday, I have made a trifling change in the resolution of Mr. Wallingford in relation to the death of Mr. Mullet. The original resolution read that he was one of the former supervising architects of the country. Mr. Adler suggested that instead of reading in that way it should be, "one of the former supervising architects of the treasury department," and that change was made

The President: There have been quite a number of communications received by the secretary, which will be read to the convention.

The Secretary: Here is a communication addressed to Mr. Hunt, signed by General Casey.

The letter is at follows:

OFFICE OF CHIEF OF ENGINEERS, UNITED STATES ARMY,
WASHINGTON, October 21, 1890.

*Richard M. Hunt, Esq., President American Institute of Architects:*

DEAR SIR,—I have the honor and pleasure to invite the members of the American Institute of Architects, in convention in this city, to visit, either in body or individually, the new building for the library of congress, and inspect the plans, models and operations in progress.

I regret that my other duties will prevent me from receiving the members in person, but they will find Mr. Richard K. Green, the superintendent and engineer in charge, and Mr. Paul J. Pelz, architect, at the office of the building, 145 East Capitol street, who will be pleased to receive them in my name and conduct them through the office and works on any day between 9 and 4 o'clock.

Very respectfully, your obedient servant,

THOMAS LINCOLN CASEY,
Brig. Gen. Chief of Engineers.

The Secretary: I have here a telegram received from J. N. Preston, which is as follows:

*R. M. Hunt, President, Arlington Hotel, Washington, D. C.*

Fraternal greeting to the American Institute of Architects now in session.

J. N. PRESTON.

I have here also a letter which has been received from the Washington Hydraulic Press Brick Company, of Washington.

The letter is as follows:

WASHINGTON, D. C., October 22, 1890.

*Messrs. J. W. Root, Wm. Poindexter and Glenn Brown, Committee of Arrangements:*

DEAR SIR,—The Washington Hydraulic Press Brick Company (a branch of the St. Louis Hydraulic Press Brick Company) cordially invites the members of the American Institute of Architects who may be interested in the scientific manufacture of press, ornamental and common brick by powerful hydraulic machinery, to visit their works at Waterloo Station, Virginia, a short distance beyond south end of Long Bridge. Such members as desire to accept this invitation will please leave their names with the clerk at the Arlington Hotel office, so that proper and comfortable arrangements for transportation can be made.

The time for starting is set for 2 P. M. on Friday, October 24; returning the visitors will be driven through Arlington cemetery and to hotel via Aqueduct Bridge and Georgetown.

Yours very truly,

HENRY WELLS, General Manager.

The Secretary: I have here a communication addressed to Mr. Elihu Root, secretary of the American Institute of Architects, which I suppose is intended for me.

The letter is as follows:

PHILADELPHIA, October 21, 1890.

*Mr. Elihu Root, Secretary American Institute of Architects.*

DEAR SIR,—Herewith inclosed I hand you a copy of two resolutions adopted by the Master Painters and Decorators Association of the United States at their sixth annual convention, held in Detroit, February last.

Will you kindly present them for the consideration of the Institute of Architects, and much oblige,

Yours truly, FRANCIS F. BLACK.

RESOLUTION ADOPTED FEBRUARY 13, 1890.

WHEREAS, The fact that architects do not usually specify the sizes of glass is a source of much inconvenience and loss to master painters:

*Resolved*, That the Master House Painters and Decorators' Association of the United States of America in convention assembled do earnestly and respectfully request architects, in future, to specify the sizes of all glass, and that the secretary be instructed to forward a copy of this resolution, under the seal of this association, to the American Institute of Architects.

FRANCIS P. BLACK, Secretary.

RESOLUTION ADOPTED FEBRUARY 13, 1890.

WHEREAS, The evils of sub-contracting have become patent to all interested in the same; therefore be it

*Resolved*, That it is the sense of the Master Painters' Association in convention assembled that sub-contracting, as applied to painters and decorators, be and is hereby declared a failure. And it is recommended by this Association that the American Institute of Architects should be notified to that effect, and respectfully requested to use all possible efforts to discontinue the same,

FRANCIS P. BLACK, Secretary.

The Secretary: I have here, also, a letter from the National Association of Fire Engineers, requesting that a committee be appointed to consult with them and the National Board of Builders in framing a uniform fire ordinance.

The letter is as follows:

CINCINNATI, October 20, 1890.

*Richard M. Hunt, President American Institute of Architects, Washington, D. C.*

DEAR SIR,—A unanimous resolution, passed at our last convention, held at Detroit, Michigan, August 19, 1890, directs me to ask the coöperation of your association with a view of consulting and selecting a plan that will result in a uniform building ordinance all over our Union. The resolution has been sent to the secretary, J. W. Root, and will probably be presented at the proper time by him. For the purpose of bringing the matter into practical shape, so there will be no delay or extra expense, we thought it best to name the time of meeting at once, namely, April 2, 1891, in New York City.

The intention of the fire engineers is to have their Executive Committee attend to their own business first, and then meet for consultation with the others that intend to coöperate on building ordinance. If all the others decide to put their Executive Committees upon this special committee and will meet in New York, April 2, then it will be well attended, and without extra expense to either association. This work, you will understand, is merely undertaken for the purpose of improving our methods of building and reducing the danger to life and property. We earnestly hope your association will be with us.

Sincerely yours, HENRY H. HILLS, Secretary.

CINCINNATI, October 12, 1890.

*To the Officers and Fellows of the American Institute of Architects—Greeting:*

The members of your association are aware of the great lack of uniformity in our existing building ordinances; you are also aware that many requirements are an actual hardship and have the effect of retarding building. Many paragraphs are so ambiguous as to be misunderstood or else have a double meaning. It is a strange commentary on the intelligence of this great nation that not a single state in the Union has a comprehensive building law, classified to meet the varying wants of its different cities.

The National Association of Fire Engineers believe that the subject of improved methods of construction should receive your most earnest and careful deliberation, for it concerns the financial welfare of the country, the personal safety of themselves and the life and property of those who are so unfortunate as to occupy these badly constructed buildings during a fire.

Therefore it was unanimously resolved at the last meeting of the National Association of Fire Engineers, held at Detroit August 19, to respectfully and urgently ask the coöperation of the American Institute of Architects, the National Builders, the National Board of Underwriters and the National Association of Building Inspectors for the purpose of either framing a model building ordinance or else consulting as to the proper method to be pursued to gain this end. The undersigned, Executive Committee, therefore respectfully invites a like committee from your Association to meet them in the City of New York, April 28, 1891, for the purpose of taking some official action with a view of bringing about the adoption of a uniform building ordinance in all the states.

Yours truly, L. P. WEBBER, Boston, Mass.,
D. J. SWENIE, Chicago,
J. W. DICKINSON, Cleveland, Ohio,
W. R. JOYNER, Atlanta, Ga.,
A. C. HENDRICK, New Haven, Conn.,
G. W. TAYLOR, Richmond, Va.,
W. H. NEWBURY, Lincoln, Neb.,
Executive Committee.

Attest: HENRY A. HILLS, Secretary.

The Secretary: I have a communication from Mr. Brady, the photographer, who is anxious to add to his large and well-known list of celebrities by photographing this association. He desires to add this photograph to his historical collection, and will take us from the steps of the Treasury Department at any time we may indicate. He will throw into the picture all the enthusiasm and experience of which he is capable. Probably today would not be a comfortable day for the work, and I suggest tomorrow. I have also received a communication from Mr. Cummings in relation to excavations at Delphi. The letter is as follows:

*John W. Root, Esq., Secretary:* BOSTON, October 21, 1890.

DEAR SIR,—I have your note of the 17th instant, saying that the Institute would be glad to hear further concerning the proposed excavations on the site of Delphi. I do not think the movement for the raising of the funds necessary to

the clearing of the site has made any appreciable progress since I wrote you last spring. The Boston Society of Architects made an appropriation of $500 toward the amount. The Greek Government has extended the time allowed for the raising of the money, so that there is no immediate danger of anybody stepping in to occupy the ground.

It is, however, I should suppose, eminently desirable that if the work is to be undertaken by the American Archaeological Society, it should be enabled to commence operations as early as possible. Yours truly.

CHARLES A. CUMMINGS.

The Secretary: I have here also a letter addressed to Mr. Hunt by Mr. E. T. Carr, of Leavenworth, Kansas.

The letter is as follows:

LEAVENWORTH, KAN., October 13, 1890.

*R. M. Hunt, President American Institute of Architects.*

MY DEAR SIR,—Anticipating the meeting of the Institute on 22d, and what will be the natural run of business, the thought occurs to me, why not do something that will be of value to those outside, as well as to the members of the Institute and their clients. For instance, agree upon a general rule of measurements in computing quantities. Instead of as at present—different rules in different localities—discard the term "perch," "yard," etc., and use the foot, 100 feet, etc. Discard the tedious rule of deducting any portion of the openings in wall when computing their contents. This rule prevails here in the West and works well. The number of bricks in a cubic foot of wall should be uniform in all parts of the country, and who can regulate such things as easily as the architect? Though late, I offer these suggestions for what they are worth, but regard the subject worth consideration. I am also in favor of adopting the decimal division of the foot, the same as the engineers use, and have advocated that in the Western Association, but the subject has drifted toward the un-American metric system.

I expect to be present at the meeting, but as yet am not certain.

Very respectfully, E. T. CARR.

The Secretary: I have also a communication from the National Association of Builders.

The letter is as follows:

BOSTON, October 16, 1890.

*John W. Root, Esq., Secretary American Institute of Architects.*

DEAR SIR,—It is the desire of the Directors of the National Association of Builders, expressed while assembled in mid-year meeting, that the American Institute of Architects be requested to take such steps as will secure the more general use of the Standard Form of Contract by its members throughout the United States. Respectfully, WILLIAM H. SAYWARD, Secretary.

The Secretary: I have here also a letter received from Mr. Albert L. West, of the City of Richmond, Va.

The letter is as follows:

RICHMOND, Va., October 21, 1890.

*R. M. Hunt, Esq., President American Institute of Architects, Washington, D. C.*

DEAR SIR,—Until this afternoon I had hoped to be present at roll-call, but pressing engagements prevent me. Being the first person born in Virginia who has practiced architecture as a profession, it would be a peculiar pleasure to me to meet so many distinguished brethren from other states. Please present my hearty congratulations to the convention. Hoping you may have a profitable convention and a season of delight, I am fraternally yours,

ALBERT L. WEST, F. A. I. A.

Mr. Upjohn: Mr. Chairman, at the proper time I would like to make a suggestion as to whether it would not be desirable for this Institute to appoint a committee for the conserving of architecture. In New York it is now proposed to concentrate the government buildings down near the Battery, and to do away with the present Custom House and also the Treasury Department. The Treasury Department is a building which has been modeled after the Parthenon, and although entirely void of sculpture, still it is a building in form which illustrates an epoch of architecture existing at the time it was built, not only here but in Europe. It seems to me this is a building which is more perfectly constructed probably than any building that I know of. It was erected at a time before iron came in as a factor in construction, and for that reason the wide roofs are supported by arches which are 16 inches thick, and the interior hall is entirely of marble and supported in masonry. To have such a building as that torn down merely for real estate speculation and have it replaced by the present mode of construction, that is by office buildings, would, in my judgment, be wrong. I think there should be a committee of this Institute, which is national in its character, who could represent these things to the general government and prevent this from being done. I should say that instead of taking down such a building as that, it should be completed and filled with sculpture like the original. In the same street also there is another building which is not so fine a model but at the same time has a certain dignity. I do not want to see the building which is now used for the Custom House torn up and split apart. I think it ought to be saved from the real estate speculators. When we ask why take down such a building, they say, then there will be more office buildings below it. I think such buildings as these are necessary for the history of architecture, for it is by architecture that history is known. [Applause.] I heard a communication read just now by Mr. Root, in which he says that the people of Boston have sent out to get what aid they can for the excavations which are now being made in Greece. Since I have come here this morning I have drafted a sort of resolution in furtherance of this idea.

WHEREAS, It frequently comes to our notice that historical and monumental public buildings are sometimes designated by our state and municipal authorities to be removed for those of a more practical and utilitarian character; and,

WHEREAS, It is sometimes done or liable to be done in a manner which would interfere with the history of architecture and perhaps destroy an epoch of representative buildings; and,

WHEREAS, The history of civilization and the world is traced by the character of its buildings and its architecture, and the degree of civilization of peoples is determined by monuments they have left,

*Resolved*, That we deprecate undue haste in these matters as being detrimental to the so-called art, and that it is our duty as architects to be conservators of public architecture; and that in our judgment this Institute should appoint a committee to be styled "conservators of the public architecture of the country"; and that this committee should call the attention of this Institute to any action which is to be made by the authorities which would be detrimental to the cause of art.

I think that such a committee as this would be a good thing, for if there is one to take charge of the preservation of architectural buildings, especially of the national buildings, it is the members of the American Institute of Architecture.

Mr. Stone: I rise to second the resolution of Mr. Upjohn. I think it is highly important for us to do what we can to preserve historic buildings, as well as it is for us to contribute money to send for the purpose of restoring the architecture in the ancient cities. Every one who goes to Rome now is deprecating the advance of speculative biddings and the destruction of old Rome. We are very young in this country, but let us preserve the reverence for buildings which have been constructed by those who have gone before. I heartily second the resolution.

The question was put to the convention upon the adoption of the resolution, and it was unanimously adopted.

The report of the Committee on Chapter Reports was submitted, as follows:

COMMITTEE ON REPORTS OF CHAPTERS.

Your committee have examined the various reports handed in, and are pleased to be able to state that the Chapters of the Institute show gratifying improvement; nearly all have held regular, useful meetings, at which papers of interest have been read, and nearly all are in satisfactory financial condition.

To read the reports in full would occupy more time than the convention has at its disposal. Your committee, therefore, submit the following synopsis for present needs. The reports will be printed in extenso, as usual.

Several Chapters are expecting to receive charters. It is recommended that the Board of Directors be instructed to examine the Constitution and By-laws submitted by the various Chapters who may now or hereafter apply for charters, and that if these are found in consonance with the Constitution and By-laws of the Institute, to grant such charters.

It is respectfully suggested that the secretary be instructed to issue printed and ruled blanks for the first page of annual reports of Chapters, so that certain statistics may be represented in uniform manner.

R. W. GIBSON,
W. R. BRIGGS,
D. ADLER, } Committee.

To sum up the Chapter reports, there were at the time of consolidation 338 members and 7 honorary members in the Western Association of Architects, with 14 Chapters in good standing, with a total membership of 355. The American Institute of Architects had 179 members, including fellows and associates, 12 Chapters with a total membership of 415, including all grades of members. The following list gives the names of the chapters, the address of the secretary and the members and grade of membership. Where members are omitted no report was received:

Baltimore Chapter—J. A. Wilson, secretary, 1 E. Lexington street; 10 members, 7 Fellows.

Boston Chapter—A. G. Everett, secretary, 60 Devonshire street; 90 members, 10 Fellows.

Buffalo Chapter—H. L. Campbell, secretary, 485 Main street; 22 members, 7 Fellows.

Cincinnati Chapter—Charles Crapsey, secretary, 46 Wiggins block; 11 members, 7 Fellows.

Cleveland Chapter—C. O. Arey, secretary, 8 Euclid avenue; 9 members, 6 Fellows.

Indianapolis Chapter—Bernard Vonnegut, secretary, 62 Vance block; — members, — Fellows.

Iowa State Chapter—F. D. Hyde, Dubuque, secretary. No report.

Illinois State Chapter—W. A. Otis, secretary, Owings building, Chicago; — members, — Fellows.

Kansas State Chapter—J. C. Holland, Topeka, secretary. No report.

Kansas City, Mo., Chapter—Jas. Oliver Hogg, secretary; 17 members, 6 Fellows.

Kentucky State Chapter—No report.

Louisiana State Chapter—W. C. Williams, Carondelet street, New Orleans, secretary. No report.

Minnesota State Chapter—F. G. Corser, secretary, 402 Nicollet avenue, Minneapolis. No report.

Missouri State Chapter—E. F. Fassett, secretary, Kansas City; 49 members, 13 Fellows.

Michigan State Chapter—J. S. Rogers, Moffatt Bldg., Detroit, secretary; 13 members, 13 Fellows.

New York City Chapter—A. J. Bloor, 18 Broadway, secretary; — members, — Fellows.

Ohio State Chapter—G. W. Kramer, Akron, secretary; 48 members, 30 Fellows.

Philadelphia Chapter—A. J. Boyden, 413 Walnut street, secretary; 75 members, 8 Fellows.

Rhode Island Chapter—E. I. Nickerson, 45 Westminster street; Providence, secretary; 17 members, 15 Fellows.

San Francisco Chapter—Oliver Everett, 408 California street, secretary; 44 members, 4 Fellows.

St. Louis Chapter—A. F. Rosenheim, 417 Olive street, secretary; 12 members, 12 Fellows.

Tennessee State Chapter—Wm. C. Smith, Nashville, secretary. No report.

Texas State Chapter—W. W. Larmour, Waco, secretary. No report.

Western New York State Chapter—W. W. Carlin, 52 Court street, Buffalo, secretary.

Western Pennsylvania State Chapter—Thomas Boyd, Thaw Bldg., Pittsburgh, secretary; 19 members, 3 Fellows.

Washington, D. C., Chapter—Robert Stead, 906 F street, secretary; 19 members, 11 Fellows.

Wisconsin State Chapter—Howland Russell, 106 Madison street, Milwaukee, secretary; 15 members, 6 Fellows.

The President: The secretary has an explanation to make in regard to the charters which are to be issued to the Chapters.

The Secretary: I would simply like to say that I have from time to time received notification of the reorganization of Chapters. I have acknowledged their reorganization, have read their Constitution and By-laws and given them a form of recognition of the Chapter; but I have had charters prepared and they are here present. They would have been signed by the president except that he was detained at Asheville. I have not been able to reach him since. I hoped that he would be here and that the charters would be signed and issued to such persons as are entitled to them. They are here, and can be

obtained, although of course without Mr. Hunt's signature at present. That subject will be taken up later.

The President: The next order of business will be the consideration of the reports of standing committees read at the convention yesterday and laid on the table. The report of the first committee is that of the Committee on Education. I hope some one will move that the report be taken from the table.

On motion the report of the Committee on Education was taken from the table for consideration.

Mr. A. J. Bloor presented a resolution, as follows:

*Resolved*, That Mr. Sturgis' letter and the report of the Committee on Education be referred to the Board of Directors for such action as may seem necessary, and that it be published in the proceedings.

After considerable discussion the question was put to the convention upon the resolution as last read and was adopted.

On motion the report of the Committee on Professional Ethics was taken from the table.

Mr. Yost: Mr. President, I move that the report be received and printed in the proceedings of the convention and the committee continued.

The motion was carried after some discussion.

On motion the report of the Committee on Clerk of Works was taken from the table.

Mr. Arey: It seems to me that the general purport of this whole report is that the architect should have a better understanding with the owner as to the supervision to be given by the architect to the work and as to the relationship of the architect to the work of supervision. Ordinarily, an architect could not be in the building enough to inspect the work. In the form of contract it says that the architect will pass upon the material and work; but he cannot do that without being there all the time. It seems to me that that clause should be so modified as to require him to pass on the material and workmanship on his visits, so that there can be no quibbling about it.

Mr. O'Rourke: I move that the report be adopted as a whole. There are several modifications that might be made in it, and among others I would suggest, if my motion is seconded, that the word "compensation" be changed to "professional fees." With regard to agreements between the architect and client, I hope that it will be adopted so that it will become general. I think it is twenty-five years since I made up an agreement of that kind, and although I have been practicing regularly, I have never had but one signed, and I have always got along just as well. I have never collected any fee until the contracts are signed. I have never known a fee to be paid upon the making of the preliminary sketches and rarely even when the drawings were completed. As a general rule the average owner is under the impression that the architect does not earn a professional fee until the work is started. My practice has been to receive one-third of the fee upon the signing of the contract and the balance from time to time as the work progresses. A clerk of work is not only required, but is a necessity for the proper carrying on of the supervision of the work, and I trust that it will come into general practice. It has become very general, especially in buildings averaging from $50,000 to $200,000. We can get very good clerks, familiar with the construction of large buildings, for the salary of $5 per day, which is $30 a week. I think that will become a general practice. It has now become very general around New York and in that vicinity. I move the adoption of the report as read.

Mr. Clay: I desire to second the motion.

Mr. Upjohn: I would like to ask a question for information. Do I understand that this elaborate report is to be printed in addition to the schedule? The relations between the architect and the owner are so strictly laid down in their contract and in every specification that is made, that I do not see any necessity for having any paper gotten out which the architect and owner are to look over before they come to an agreement. I do not know really of any condition which may exist between architect and owner which is not laid down in the contract for the building, and in the specifications which are drawn as the regulation of that contract. I cannot see the advantage.

Mr. Gibson: It might be well for me to say two or three words in explanation of that report, because it is so lengthy a report the essence of the matter may be a little hidden. The changes contemplated are very slight indeed. The percentages and installments are exactly the same as they now stand, made to agree and harmonize with the stipulations of one per cent for this and one and a half per cent for that, and put into vulgar fractions, so that in the event of another percentage being agreed upon the same phraseology would answer. There is no change, except the addition of two or three lines in the schedule. It is proposed to add two or three lines saying that a clerk of work will be supplied for $30 per week. In another place, where there are already about a dozen lines regarding the difficulties of the architect, it is proposed to add a few small words, the essence of it being that the architect is not responsible for the willful misdoings of the contractor. The committee thought that the definition of superintendent was a most important thing. The avowal by architects of a fact which they are continually asserting was not desirable, and we have put into print that the architects are not financially responsible for the willful misdoings of contractors. It was proposed to print a blank contract. The committee found that many architects have been in the habit of using such a blank, and not to print it in the usual way, but to print it as a letter, and have it returned by the client signed and accepted. It was not intended to print it in such a way as necessitates a formal meeting and signing, sealing, etc. Suppose that any individual member of this Institute has such a blank contract sent to him. He could put it in his waste paper basket and not use it if he saw fit. It is simply a supplement by the Institute for the general good of the members that such a blank contract should be provided, letting the question settle itself as to whether it should be used or whether it should not be used. I think that a committee should be appointed to consider the matter, and if there would be no unnecessary disagreement with regard work.

Mr. Clay: I would like to have Mr. Treat explain their method. I think that they have, perhaps, as nice a way of regulating their responsibility on account of the contractor as any member of the profession.

Mr. Treat: As well as I can recollect our form of contract makes the architect a third party to the contract, and in that clause it defines his duties and responsibilities. That is all there is to it. A great deal of what is incorporated in this report of Mr. Gibson is condensed in a very small space in that contract between the owner, the contractor and the architect.

Mr. Upjohn: I want to inquire how responsibility can be evaded if we give certificates for the work. If we give certificates we assume the responsibility for their correctness. If we employ another architect, and he gives a certificate that the work is all right, and then we make a certificate, we will have to pay if the certificate is not correct. It is according to the terms of the contract. We cannot evade that. If we belonged to one of the other professions, and our clients get killed on the ground, then we can say that someone else has killed them; but we have a building staring us in the face.

Mr. Mason: I think that Mr. Upjohn is right; we are responsible, and we have got to accept that responsibility. If we go into a court of law, we will find out whether we are responsible or not. It seems to me that this schedule covers everything of this kind. We have got to examine this building before its adoption. There is a clause here about a clerk of the works, who shall be appointed by the architect and paid by the owner. As to legislating with regard to how much he is to receive, I don't think it is any of our business; we are not to regulate prices of any other trade or profession. Now, with regard to the question of "supervision" and "superintendence." About the time that this schedule was revised in Albany in 1884, the word "superintendence" alone had been used in the schedule; it had made more or less confusion, and it was changed. Mr. Upjohn had a good deal to do with this question of the supervision or superintendence of an architect as distinguished from the continual personal superintendence which might be secured by the employer of a clerk of works. And it thoroughly defines what the supervision of an architect means. It does not mean that he is to go there every day or every hour in the day; but he is to go as often as it is necessary for him to do so for the purposes of his general supervision. If the owner wants more than that, then he employs a clerk of works and pays him. It seems to me that covers the whole ground, and there is no necessity for putting in another word. The word "minimum" was an advantage.

Mr. Gibson: I would like to explain that in specifying the sum to be paid to a clerk of works, the committee did not wish to dictate to any trade or profession, but simply to take advantage of the fact which we all recognize in human nature, that when anyone names a price for a thing he is very much more likely to induce the purchase of that thing than if the amount is left vague and indefinite. I think we all agree that there is a great deal of misunderstanding between architects and clients. A great many clients would ordinarily employ the clerk of works if they understood anything about how to do it, and especially if it was not made very expensive or difficult. There is no desire on the part of the committee to make the compensation $30 a week. That is simply a sum that a great many architects have agreed on, and which we all know is frequently paid for a fairly good assistant superintendent. It may be changed, or it may be made very elastic, say from $25 to $35. Personally, I still think that it would be very wise to name some limit, so that a client, when he is given this piece of paper, can see that it is not a very expensive matter. Speaking of the change of schedule, I would like to remind the convention that there are a great many phrases included in that so-called schedule of charges that do not properly appertain to the schedule, but which are rather a definition of the duties. Mr. Upjohn objected in very forcible language to dickering with this schedule, and immediately suggested an amendment which might be made to it. The committee stated in this report that it would be well to put into words that part of the schedule as was usually understood. I think the majority will agree that it has long been tacitly understood that architects are not responsible for a willful breach of the contract on the part of the contractor; that the architect agrees to keep things right as far as possible, or so far as within his power; but, as Mr. Frost has said, he is not responsible for bad workmanship when a man has been cut down by low prices, and must make his profit by willfully bad workmanship. It has been said that the word "superintendence" has been defined by law. I think that is wrong. I think the law never has defined what the superintendence of an architect is. If it has been done, then this clause "supervision of works," which we propose to amend to some extent, is altogether superfluous and should be stricken out. We have considered that something of this kind was necessary, and a few words were put in, not with the view of changing the definition of the word "superintendence," but to explain the responsibility following the superintendence. I refer to the responsibility for bad workmanship.

Mr. Preston: I can give the animus of this suggested change in regard to the clerk of works, which I think I perhaps suggested a few years ago at one of our conventions. It was suggested that this should be done for the purpose of giving instruction and information to the owner who proposed building. We all know that in many cases it is very desirable to have a clerk of works employed, but owners are sometimes a little niggardly in regard to their expenditures and want to cut off all the corners they can. When they come to you you say, this is a building where I cannot give you all the supervision that I think

you will need, and I want you to employ another man at five, six or seven dollars a day. The owner will answer, I am employing you to supervise this building; Mr. So-and-so supervised a certain building down in Chicago for a certain gentleman, and I do not see why you cannot get along without any clerk. My object in suggesting this change to the committee—the object I have in suggesting this addition to the clause in regard to the clerk of works, is simply explanatory, and is for the purpose of giving information to owners as to what is the proper thing to do. I think it is indefinitely worded as it now stands, because it says on buildings where it is deemed necessary to employ a clerk of works. I thought that in the interest of architects it would be well to express the opinion that on most all such buildings it is necessary to have a clerk of works employed. The amount of money to be paid will depend upon the locality and other circumstances. I think it is desirable to impress on owners that a clerk of works should be employed, so that he might not look upon it simply as the individual expression of an architect whom he employs and whom he might think perhaps desires to shirk the duties which properly belong to him. This is the first and main object of this additional modification to this schedule. I think that is what we want to accomplish, and we ought to put it in such shape that it will be unmistakable that it is the general opinion of reputable architects throughout the country that the building ought to have such a man employed.

Mr. Hannaford: This question of responsibility has frequently been decided against us in this country. We could not probably adopt anything that would influence the courts. But I think the moral effect of adopting this portion where it says that we are not responsible for the willful acts of the contractors would have a good effect; because most of our clients do not know of these decisions. In France the architect is only held responsible for errors of construction—mistakes in plans. While I agree with Mr. Upjohn and Mr. Mason, yet I hope that the clause will be adopted because of the moral effect it will have. I made a motion a few moments ago that this report be referred to the Board of Directors for consideration and that it be presented before us at the next convention.

Mr. Treat: I will give you a little experience that we have had and are having. About four years ago a non-resident—and we will call him Richard Roe—came to our office. He had a piece of property on the South side and he wished to improve it in a cheap way. He wanted to build fifteen houses and did not even wish to go so far as to put a brick basement under the houses. He built the fifteen houses for about $26,000. Of course such owners always want to employ the lowest bidder and it was done in this case. The houses were finished. We had some trouble with the contractor, and in fact we never fully accepted the work. We retained some of the contract amount. A year after that time we were employed by the same client to do other work, and still a third time we were employed by him. We sent him our bill to this city where he resided, and he wrote back to us that he thought it was accepted. We told him that if he thought it was accepted we would make him a present of the bill. He wrote back saying that he must have been in a bad humor when he received the bill and sent us a check for the money, saying that he had always been very well satisfied with our work. This is four years ago. This spring we received a notice from his agent that he was not able to rent these houses. I should have said before that his agent in Chicago called upon us and wished to borrow the plans and specifications, giving us the impression that we were to do more work of the same kind for this non-resident. This spring we received a notice, a long, legal document from his agent, in which he said that the houses were in such bad condition that they could not be rented. He said that the wind blew through them and that you could throw a cat out of them almost anywhere, and that the owner was damaged to the extent of $15,000. Such experience as this is the father to the clause which we want to introduce in the contract. I would like to know where the justice comes in in such a proceeding as this which I have just related.

Mr. Arey: I think one of the main points comes in here. When we issue a final certificate or a final estimate, if the architect certifies that the work is done properly, and it is not, he takes the responsibility. But if he simply estimates the amount of money due the contractor, I do not think he takes any responsibility. It has always been held in the courts that the architect's certificate is the expression of an opinion, and even in giving a final certificate, if he has used proper diligence to qualify himself for making the certificate, he is protected. There was a case where a man gave a certificate which proved to be erroneous, and the owner brought suit for the damage he had suffered. The court cleared the architect. It seems to me that it is a great damage to the profession to have men as old and experienced as Mr. Upjohn and Mr. Mason get up here and say that it is the custom of the profession, and that architects do assume full responsibility. It is certainly the fact that the courts do not impose such responsibility upon them. They can assume it for themselves if they desire to.

Mr. Treat: I would like to say further that in that contract we had no idea of shirking any responsibility or of shirking the proper superintendence.

The discussion occupied almost the entire session, at the conclusion of which the following resolution was passed unanimously:

*Resolved*, That the report of the Committee on Clerks of Works be accepted, printed in the report, and for distribution, and referred for consideration to the Board of Directors, instructing them to order it as a special subject for the next convention.

Mr. Clark: I have a letter from the National Association of Master Builders, which seems to me to need action. I will therefore offer this resolution:

*Resolved*, That while uniformity in building contracts is desirable, it is not advisable to limit the discretion of architects in this respect.

I do not think we should be dictated to as to what sort of a contract we can make, by the builders.

Mr. Adler: Mr. Chairman, I believe that the practice of architects in the use or formation of contracts has not been limited heretofore. I do not believe anybody has made any effort to limit us. The only thing that has been done is that by the joint action of the Western Association of Architects and the National Association of Builders, a form of contract was adopted after much labor by a committee in which the architects were certainly well represented, and this contract has been given to us. We may use it or not at our discretion. We are not bound to use it in any way, and I think it would be a discourtesy, to say the least, to the very able men who represented us on the committee, if we were to culminate against it an indirect vote of censure, as is now proposed.

Mr. Clark: The Builders' Association sent a letter to us, asking us to enjoin that form of contract on all our members, and we ought to make some reply to it.

Mr. Adler: We are not compelled to act at all. I take the ground that this association differs from all others of a similar nature connected with building enterprises, in that it is not in any sense a trades union. It is merely a body assembled for the general improvement of the condition of its members, and it makes no effort to coerce in any way the action of its individual members. We have a schedule of prices, but we do not force our members to adopt it in their practice. We simply recommend it. We have no connection with the National Builders' Association. The form of contract which many of us have is a good one; but we do not force the individual members to make use of it. I think that in all of our actions we should take this course, that the resolves of this body are merely advisory and not, in any sense, mandatory, and that we should not pass any resolution that would make it appear that it is in our power to force our members to use any particular form of contract. Therefore, I consider Mr. Clark's motion a superfluous one, and one that ought not to be carried.

The President: The question now is upon the resolution of Mr. Clark.

The question was put to the convention upon the resolution as above stated, and the resolution was lost. The convention adjourned until 8 o'clock P. M.

## SECOND DAY—EVENING SESSION.




The convention was called to order at 8:30 o'clock P.M., W. W. Carlin presiding.

The President: A motion to take the report of the Board of Directors from the table will be in order.

Mr. Adler: I move that the report be accepted, and that it be printed with the records of this convention; and that the recommendations contained therein be taken up seriatim.

The motion was seconded by Mr. Stone, and the motion as above stated was carried.

The President: The secretary will read the first recommendation which calls for the action of the convention.

The Secretary: The first subject is the proposed amendment to the constitution touching the subject of local Chapters in their connection with the Institute. Perhaps in this connection it might be well for me to read the form of amendment which was submitted to the members of the Institute on informal ballots, after the first meeting of the Executive Committee.

The clauses in the articles to be amended are as follows: Article I, Section 2; Article I, Section 6; and Article X. At present the second section of Article I reads as follows: "Sec. 2. Candidates for admission to Fellowship shall submit to the Board of Directors, through the secretary, an application for membership made as follows:" Then follows a form of application for membership. This article is to be modified as follows: "No person shall be elected a Fellow of the Institute unless he shall have been elected an associate member of the Chapter." The rest of the section is to remain as it now is. In Article I, Section 6 ——

Mr. Adler: Mr. Chairman, would it not be well, in order to avoid confusion, if these proposed amendments were acted upon individually. This has now been read by the secretary and we can act upon it, and then take up the next one.

The Secretary: Would it not be better to have a comprehensive survey of the entire drift of the amendments, as proposed.

Mr. Gibson: I suppose that the term "an associate member" means at least an associate member.

The Secretary: They must be at least associate members.

Mr. Gibson: I take it that some Chapters have members who have never been and never will be associate members.

The Secretary: In the discussion at that time the idea was that the first requirement should be an election as an associate member of a Chapter. From that point it became possible for a person to be elected a member of the Institute, and at the same time he was elected a Fellow of the Institute he became a regular member of the Chapter.

Mr. Gibson: Then a regular member of a Chapter is not eligible to the American Institute.

The Secretary: A regular member must be a member. A new member would first have to become an associate member of the Chapter, and then he could become a member of the Institute. In becoming a member of the Institute he becomes a regular member of the Chapter.

Mr. Briggs: That is the point we wished to avoid, for if he becomes a regular member of the Chapter his dues would be burdensome.

The Secretary: This is, of course, a very delicate point, which needs a good deal of discussion. It was intended in Article I, Section 6, to provide that every Fellow shall be a member of a Chapter. At present Article X reads as follows:

The Institute shall encourage the formation and continuance of state and local associations, which shall be known within the Institute as Chapters. These bodies shall continue and shall be organized under charters from the Institute, which may be granted by the Board of Directors, and which shall clearly define the limits of territory and jurisdiction of the bodies existing or to be found. The general formation, government, standard of membership and form of election of members in these bodies shall be uniformly prescribed by the Institute, but each body shall have the power to make further rules and by-laws as it may deem best, provided no action shall be taken which shall conflict with the Constitution and By-laws of the Institute.

This is to be amended by adding to it as follows:

Associate members of Chapters when elected as Fellows of the Institute shall become regular members of Chapters.

The President: What action will you take upon this amendment?

It was moved and seconded that the first proposed amendment to the By-laws be adopted.

Mr. Stone: Will the secretary please read that once more?

No person shall be elected a Fellow of the Institute unless he shall have been elected an associate member of the Chapter.

Mr. Gibson: What becomes of all those Fellows of Chapters who have never been associate members and never will be?

Mr. Yost: Mr. President, I think it is perfectly clear what becomes of the regular members of Chapters. They do not go backward at all; they stand exactly as they are. As I understand this proposal it is that a stepping-stone toward becoming a regular member of a Chapter and a Fellow of the Institute is placed under the name of an associate member of the Chapter. He cannot become a member of this Institute or a regular member of a Chapter until he takes the first step of being an associate member of a Chapter. Those who are already regular members do not have to go backward. They are beyond that and it is no concern to them. This concerns men who have never been members of the Chapter. They cannot be regular members of the Chapter unless they are members of the Institute.

The Secretary: If I can explain for a moment I will ask to be relieved from any further defense of this amendment, as it is not mine. The point has been made that Chapters should not exist as Chapters of the American Institute of Architects in the anomalous position of being composed mostly of persons who are not Fellows of that Institute, and it was argued that if the Institute of Architects was to have Chapters attached to it, those Chapters, in regard to their regular membership, should be composed of Fellows of the Institute. The second point was that admission to the American Institute of Architects should be through such channels as would best guarantee the character and qualifications of the persons admitted; and that no easier method of admitting Fellows to the Institute could be devised than through the election to their local organization. So in order to give every latitude, it was thought that five Fellows of the Institute might at any time form a Chapter, whether they affiliated as to geographical conditions or not, and it was further held that they might associate with themselves a second grade of members called associate members, who are not Fellows of the Institute. These associate members were then eligible for election as Fellows of the Institute; but the Chapter was to first pronounce its opinion of their qualifications when they elected them as associate members. When the American Institute of Architects elected these associate members as Fellows of the Institute, by that act they were created regular members of the Chapter. My question I think remains unanswered. The Chapters as at present constituted have but a very small number of their regular members who are members of the Institute.

Mr. Root: At the second meeting, in which that matter was re-debated, it was stated that in the opinion of the Executive Committee this amendment could not be made retroactive, except with the consent of the Chapters.

Mr. Gibson: Again I ask, what becomes of those Fellows of Chapters who are not now members of the Institute—and there are a great many of them. Many Chapters have a large membership with only five or six who are Fellows of the Institute. What becomes of those members who are Fellows of the Chapter and who are not associate members, and never will be?

Mr. Kendall: I think that there are, strictly speaking, no Fellows of Chapters. There are members of Chapters and Fellows of the Institute, but I do not think the title of Fellows of Chapters will hold. In New York we have two grades of membership only—practicing members, who are mostly Fellows of the Institute, and associate members. A difficulty does arise, however, from the fact that there are many practicing members in our Chapter who are not associates, and who would not therefore become, strictly speaking, eligible to membership in the Institute.

Mr. Adler: It seems to me that this discussion has run ahead of the amendment before us. The amendment which is before us is this:

No person shall be elected a Fellow of the Institute unless he shall have been elected an associate member of a Chapter.

What is meant, as I understand, from the explanation made by the secretary, is that no person shall be hereafter elected a Fellow of the Institute who has not become an associate member of a Chapter. It is not retroactive. This, of course, has nothing whatever to do with those who are now Fellows of the Institute and not members of Chapters. It is merely something that is to guide us in our action hereafter. I would like, however, in order to make this matter perfectly clear, to change the wording of this proposed amendment, and offer as a substitute for it the following:

*Resolved*, That hereafter no one shall be admitted to Fellowship of the American Institute of Architects who is not already a member of a Chapter of the Institute and whose admission to such Fellowship has not been recommended by the officers of his Chapter.

The word "hereafter," at the beginning removes the objections that have been made by Mr. Gibson, and the clause which I have appended, to the end that the admission to Fellowship in the Institute of a candidate must be recommended by the officer of a Chapter, fixes more definitely the purpose of this amendment.

Mr. Poindexter: I would like to ask how that would affect candidates for members of the Institute who were not in the jurisdiction of any Chapter.

The Secretary: It was that question which caused the Executive Committee to waive all question of geographical limits. It was thought that a man, if he were remote, with a number of persons similarly situated, might organize a Chapter simply for the sake of conforming to this regulation. For instance, one man in Louisiana and a man in Mississippi and a man in Texas and a man in Alabama and a man in Georgia could unite and form a Chapter, with the pecuniary regulations as light as might be, but, of course, not a Chapter for the active work which would necessarily take place if they were in close affiliation with each other.

The secretary again read the resolution of Mr. Adler.

Mr. Adler: The objection has been made to me just now that the word "hereafter," occurring in the By-laws, might lead to a misunderstanding. Suppose that we substitute for the word "hereafter" the words "after October 23, 1890," so as to do away with that objection.

Mr. Littell: I would also suggest the omission of the word "already." I think the amendment without that word would accomplish its purpose better than it does now.

The President: I would suggest that these amendments be acted upon provisionally; that they be provisionally accepted until the whole list has been gone through with, and then we can accept them as a whole.

Mr. Adler: I believe that this amendment will stand, no matter what we have done with the others. There is nothing in any of the others but what, even if they are rejected, would permit this one to stand by itself. I think it would be better to take them seriatim, and act on each on its merits.

The question was put to the convention upon the resolution of Mr. Adler, and the resolution was carried.

The Secretary: The next amendment proposed is to Section 6 of Article I. The amendment is as follows:

Every Fellow of the Institute shall be a member of a Chapter,

Mr. Adler: Mr. Chairman, I move that this amendment be laid on the table.

Mr. Adler: My purpose in doing this is for the reason that the relations between the Institute and the Chapters of the Institute are far from being well and clearly defined. The questions which have been asked about this matter this evening within the last ten minutes, show clearly that we are not in a position to take as definite and pronounced a stand on this subject as that amendment would indicate. I was on the committee to revise the reports of Chapters of the Institute, and I was surprised to find how large a number of the members of Chapters are not members of the Institute. Upon inquiry I am also surprised to find how many there are here who are members of this Institute and who are not members of Chapters. Until the Executive Committee, or the Institute as a whole, shall have discovered a modus vivendi—shall have discovered a means of harmonizing the rather complicated interests of Institute and Chapter—it seems to me that as sweeping a resolution as the one which is offered had better rest on the table.

The question was put to the convention upon the motion to lay the proposed amendment on the table, and it was adopted.

The President: The secretary will please read the next proposed amendment.

The Secretary: The amendment to Article X moves in step with the original article up to the last words "the Constitution and By-laws of the Institute." At that point there is added the following sentence:

Associate members of Chapters, when elected as Fellows of the Institute, shall become regular members of Chapters.

Mr. Adler: I also move that that amendment be laid upon the table. My reasons for proposing this are as follows: There are at present many Chapters which have associate members and regular members. There are differences of dues and possibly other differences in the conditions of membership, as between associate members and regular members of Chapters. I do not think that in the present status of the relations between the Institute and its Chapters, it is possible for the Institute to decree emphatically

that members of one grade of Chapters shall, when they become Fellows of the Institute, by virtue of such admission become regular members of Chapters. The power to make regular members of Chapters is one which we cannot very well take from the Chapters unless we shall have arranged a method of harmonizing the rules and regulations governing memberships to the various Chapters. While this proposed additional sentence may eventually be the very thing for us to adopt, yet it appears to me that it is now impracticable, and that we can well afford to let the matter rest without action.

The motion to lay the proposed amendment on the table was seconded and carried.

The Secretary: The next proposed amendment is to the schedule of charges, and consists in striking out in the fourth clause the words, "for surveys and measurements."

Mr. O'Rourke moved that the proposed amendment be accepted. Seconded by Mr. Briggs.

After discussion and amendment the secretary read the proposed amendment as follows, which was carried:

For alterations and additions an additional charge to be made, and also an additional charge to be made for surveys and measurements incident thereto.

The next proposed amendment was read by the secretary:

That an addition be made to the schedule of charges of a clause determining a percentage fee for the making of measurements and surveys of materials, etc.

This may not be fully worded; but the question was raised by Mr. Smith, of Nashville, and it was intended to cover such services as an architect might render in taking off quantities.

Mr. Smith: With reference to the last item mentioned by the secretary, I will state that the Board of Directors appointed a committee to take this matter into consideration, and we found it inexpedient to recommend an amendment prescribing a percentage fee for taking off a bill of quantities.

Mr. Adler: Will the secretary be kind enough to read from our Constitution the definition of the term "architect."

The secretary read the definition.

Mr. Adler: In view of the definition of the term "architect," as it is officially understood, I think it is clear to all of us that if it becomes necessary in the course of the discharge of the duties of an architect, as enumerated in this definition, to make bills of quantities and bills of materials for buildings under his charge for his client, that that is something the arrangement for the compensation of which lies between him and his client, and is covered probably by the terms of our schedule as it now stands. If an architect goes outside of his functions as here defined, and prepares bills of quantities for others than his client, then it is something which is really outside of his functions as here defined. It is something concerning which the Institute as such cannot very well afford to take any action upon. I therefore move that the matter presented in reference to this subject by the Board of Directors be laid on the table.

The motion was seconded and carried.

The fourth amendment proposed was read by the secretary, creating a new officer of the Institute in the person of an assistant secretary and treasurer.

The President: That would be an amendment to the By-laws.

Mr. Adler: Mr. President, I am very sorry to appear repeatedly as the mover of motions to lay the recommendations of the Board of Directors upon the table. But I feel myself constrained to do so again in this case for these reasons. It is of the highest importance for the continued virility of the conduct of the affairs of the Institute that all of its officers be taken from among us. It is important that they be constantly in touch with our interests and our aspirations. Our present method of electing a secretary, who is a secretary de facto and de jure, whom we allow a sufficient compensation so that he can employ necessary clerical help, clerical help which is entirely under his control and over the acts of whom he has absolute control, is perfectly satisfactory. He acts. The initiative is his. This has operated very well in the past and I think it is worth while trying a little longer. We are pleased now with the secretary, who represents, certainly, the highest and best business capacity there is among us; and when he no longer will serve us I have no doubt that we can find many representatives of the same grade. We will avoid by that means the danger of having a secretary who becomes gradually the depository of the accumulated traditions of the Institute, an automaton, a something without any virility, a mere machine, a $2,000 machine, while the nominal and titular secretary does nothing, gives no initiative, and is not responsible for anything. I think that we ought to exhaust our entiré membership in efforts to secure a secretary who will be a secretary, before we abandon our present system. While I must apologize to the Board of Directors for the seeming slight which I cast upon their recommendation, I still move, and again move that this recommendation be laid upon the table.

Mr. Clay: I have to apologize for seconding so many of Mr. Adler's motions.

The Secretary: May the Board of Directors make an explanation in regard to the matter?

Mr. Stone: I think that any rule that prevents it should be suspended so that we can have an opportunity of hearing the views of the Board of Directors.

The Secretary: The motive of the Board of Directors in making this recommendation was as follows: It was thought well, perhaps, that the offices of secretary and treasurer of this association should continue in their present form; that all questions of policy and matters of initiative, every act demanding anything but a clerical act, should continue to be performed by the secretary and treasurer of this association. But it was thought that it would be well to have a salaried clerk to those officers, whose sole duty it would be to perform the mere clerical functions of the office; that he should hold his office during good behavior; that he should have no power of initiative; that he should forward every official enunciation of the convention from year to year and attend to the clerical business of the office; that he should have a permanent office to which all communications addressed to the Institute could be sent; that all communications sent to this office and demanding any sort of action of color or action of quality should be referred to his superiors, but when a man writes to the secretary to ask, will you kindly inform me how I can become a Fellow of the Institute of Architects, that he should take care of all that sort of thing; that he should keep the papers on file, and that he should have a permanent headquarters, not changing as the position of the secretary and the treasurer changes.

The motion to lay on the table was carried.

Mr. Fassett: Mr. Chairman, I would like to ask for information. I did not quite understand it before, or else I misunderstand it now. It is in regard to this amendment to Article X. I do not know whether I understood Mr. Adler right or not, when he said that the whole of that proposed amendment was to be stricken out, or only so much of the last part of it as relates to the Fellows of Institutes becoming regular members of Chapters. As I understand it, laying this proposed amendment on the table leaves it as it stands now, and Chapters can be formed whether they are members of this Association or not.

The President: It is just as it was before.

Mr. Adler: I would like to bring a resolution before the Institute which has particular reference to the recommendations made by the Directors this evening as to the relations of the Institute to the Chapters. The resolution is as follows:

*Resolved*, That the Board of Directors and the Executive Committee be instructed to investigate thoroughly the conditions and membership of the various Chapters of the Institute, and to place themselves into communication with the same with the view of formulating for presentation to the Chapters and to the next convention of the Institute a plan for establishing such practical uniformity of conditions of membership as will be most beneficial to the Institute and its Chapters.

Mr. Nickerson seconded the resolution, and it was adopted.

A resolution regarding a trip to the Pacific slope and a convention en route was presented by Mr. Wallingford and lost.

The Secretary: Permit me to call the attention of the convention to a fact which was omitted. I have to announce the death, in New York, during the last year, of Henry Parry Liddon, who has been for a long time an honorary member of the old American Institute of Architects, and of this Association.

On motion the customary resolution of condolence was passed by the convention.

The matter of the reimbursement of members for excessive railroad fares was discussed and laid on the table.

The secretary brought to the notice of the convention a bundle of papers representing a controversy in the San Francisco Chapter. This was decided to be a local issue and referred back to the Chapter.

The President: It appears that in the consolidation of the Western Association of Architects and the American Institute of Architects, all of the honorary members, as heretofore published in the list, were dropped. The Board of Directors has appointed a committee to consider this matter, and the secretary has a report to make, which he will please read to you.

The Secretary: Mr. Chairman, Mr. Littell and myself were appointed a committee to recommend this list of members but it is not quite prepared, and with your permission we will recommend it so as to have your action upon it in consonance with the general election of officers, which will be at such time as you may designate.

The President: I will appoint as the nominating committees the following gentlemen:

First Committee: J. W. Yost, Columbus, Ohio; Alfred Stone, Providence, R. I.; J. H. Pierce, Elmira, N. Y.; W. C. Smith, Nashville, Tenn.; A. P. Cutting, Worcester, Mass.

Second Committee: R. W. Gibson, New York; E. F. Fassett, Kansas City, Mo.; W. G. Preston, Boston, Mass.; S. M. Randolph, Chicago; Geo. C. Mason, Philadelphia.

Mr. Gibson: Mr. Chairman, I hope you have kept in mind the fact that I am already a member of the Board of Directors. I am not aware whether that renders me ineligible for such a position or not.

The President: The convention will recall the recommendation made by the secretary that the National Association of Fire Engineers asked this convention to appoint a committee of seven to meet a corresponding committee of their association and also one from the National Builders' Association, to meet in New York, for the purpose of considering the question of a uniform building law for the whole country.

On motion of Mr. Adler, that such a committee be appointed by the Board of Directors' Executive Committee, this was ordered.

E. F. Fassett, of Kansas City, read the paper by S. E. Chamberlain (printed on page 56).

Mr. Stone: I move that a vote of thanks of this convention be tendered to Mr. S. E. Chamberlain for his very interesting paper upon the "Foundations for City Hall in Kansas City," and to Mr. Fassett for reading the same. I also move that the paper be printed in the proceedings of this convention.

The motion was seconded and carried.

Frederick Baumann, of Chicago, read a paper on "Thoughts on Architecture" (will appear in regular issue for November).

Mr. Ferry: I move that a vote of thanks of this convention be tendered to Mr. Baumann for his contribution to our pleasure, and that his address be printed as a part of the proceedings.

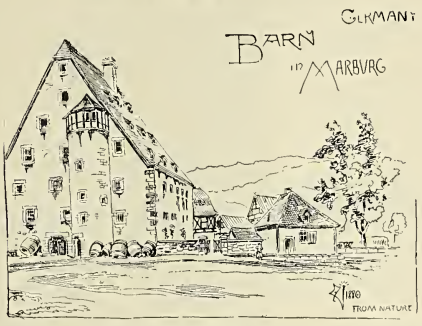
The question was put to the convention on the adoption of the motion as above stated, and it was carried.

Mr. Stone: I move that the paper prepared by Mr. Bloor be spread upon the records of this convention as if read, and printed as a part of the proceedings.

The question was put to the convention on the motion of Mr. Stone as above stated, and it was carried. (Printed on page 40.)

The session then adjourned.

## THIRD DAY—MORNING SESSION.




The convention was called to order at 10:30 o'clock A. M., W. W. Carlin presiding, who called for the reports of the nominating committees.

Mr. Yost: I desire to submit the report of Committee No. 1, which has nominated for the officers of the Institute the following gentlemen:

For president, R. M. Hunt, New York; first vice-president, W. W. Carlin, Buffalo, N. Y.; second vice-president, J. W. McLaughlin, Cincinnati, Ohio; secretary, Jno W. Root, Chicago, Ill.; treasurer, S. A. Treat, Chicago, Ill.

Directors: L. T. Scofield, Cleveland, Ohio; W. M. Poindexter, Washington, D. C.; G. B. Ferry, Milwaukee, Wis.; G. C. Mason, Jr., Philadelphia, Pa.; C. J. Clark, Louisville, Ky.; M. J. Dimmock, Richmond, Va.; Alfred Stone, Providence, R. I.; E. F. Fassett, Kansas City, Mo.

Place of meeting—New York.

Mr. Gibson: Mr. President, I beg to submit, on behalf of the second nominating committee, the following report:

For president, Richard M. Hunt, New York; first vice-president, James W. McLaughlin, Cincinnati, Ohio; second vice-president, Alfred Stone, Providence, R. I.; secretary, E. I. Nickerson, Providence, R. I.; treasurer, Levi T. Scofield, Cleveland, Ohio.

Directors: W. M. Poindexter, Washington, D. C.; J. W. Yost, Columbus, Ohio; N. S. Patton, Chicago, Ill.; G. A. Frederick, Baltimore, Md.; E. T. Carr, Leavenworth, Kan.; G. W. Rapp, Cincinnati, Ohio; A. P. Cutting, Worcester, Mass.; N. J. Clayton, Galveston, Texas.

The selection of the place of the convention of 1891 is left to the Board of Directors.

On motion, the reports of the nominating committees were accepted, and the convention proceeded with the election.

The President: I will appoint as tellers Messrs. C. O. Arey and J. H. Pierce. The secretary has received the report of the committee which was appointed to attend the funeral services of Mr. Mullet yesterday. He will read the report.

WASHINGTON, D. C., October 24, 1890.

*To the American Institute of Architects:*

Your special committee to attend the funeral service in Washington of the late A. G. Mullet, ex-supervising architect of the United States Treasury Department, respectfully report that Mr. Scofield's engagement, to his great regret, prevented him from going to said services, but that Messrs. Hannaford and Bloor were in attendance thereat. Respectfully submitted.

A. J. BLOOR,
SAMUEL HANNAFORD.

The President: I wish to call the attention of the convention to the fact that nothing has been done with the standing committees, and to inquire whether the convention desires to continue those committees in any form, or whether it desires to have them appointed by the Board of Directors.

On motion, it was ordered that all standing committees on the list, except the Committee on Education and the Committee on Formation of Chapters, be continued and be appointed by the Board of Directors or the Executive Committee.

The President: The secretary has a telegram which he will read to the convention.

CINCINNATI, Ohio, October 24, 1890.

*To J. W. Root, Arlington Hotel, Washington.*

OFFICERS AND FELLOWS OF THE AMERICAN INSTITUTE OF ARCHITECTS,—It was unanimously resolved at the last meeting of the National Association of Fire Engineers held at Detroit, August 19, to respectfully and urgently ask the cooperation of the American Institute of Architects, the National Association of Builders, the National Board of Underwriters and the National Association of Building Inspectors for the purpose of framing a model building ordinance, or else consulting as to the proper method to be pursued to gain the advance. The Executive Committee, therefore, respectfully invite the like committee of your Association to meet them at New York next April 2d.

The President: You will remember that this committee was ordered to be appointed last night by the Board of Directors, and if it is thought desirable, a motion might be made in this connection. Application should be sent to them, as I understand it; they are in session now.

The secretary was instructed to reply to the telegram that this convention had instructed its Board of Directors to appoint such a committee.

The President: The secretary has an explanation to make to the convention in relation to the charters to be granted to Chapters.

The Secretary: In relation to the charters, it has been thought best by the Board of Directors, particularly as Mr. Hunt, the president, is not here, that the matter had better be taken up in regular form at the next meeting of the Board of Directors, which will be in January. At that time the entire status of Chapters will be gone into, and these official charters will be signed by the secretary and president and forwarded to each Chapter in regular standing. There is a matter which was mentioned yesterday on which I have been requested to report, and that is the subject of honorary members. The committee appointed to examine into the subject by the Board of Directors have reported that the entire list of honorary members of the American Institute of Architects—I refer to the American Institute before the reorganization or amalgamation—shall be continued, and to that list shall be added the following names: John M. Van Osdell, of Chicago; Mr. Henry Whitestone, of Louisville (both of these gentlemen are very old; they are both architects of very long and very considerable practice, and we thought, entirely deserving of this honor); J. W. Ellsworth, C. E. Hutchinson, Ferd W. Peck. All these gentlemen are very well known to us, and have been most influential in many directions in contributing to the art status of the country, and their appointment would confer upon us very marked honor. As a practical advantage, I think our appointment of these gentlemen might be of some value to us in connection with the World's Fair, in which you are all interested, because no three gentlemen could be named whose unofficial influence would be so marked abroad in securing contributions of works of art, not only from governments, but from private individuals.

On motion of Mr. Stone, those mentioned by the secretary were made honorary members.

Mr. Stone: At the last meeting of the annual convention I brought a matter to its attention. I offer the following resolution at this time:

*Resolved*, That any person who has been a member of the American Institute of Architects for ten years, upon attaining the age of seventy, shall be exempt from annual dues, and shall retain all the privileges of the Institute, including the privilege of voting.

The resolution was carried.

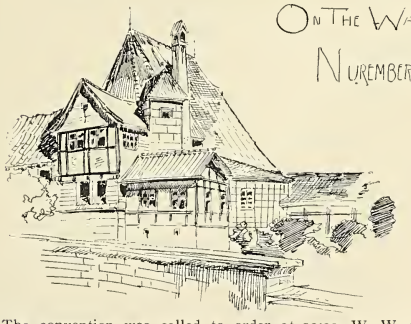
Mr. Nickerson: I would like to inquire, as all Fellows of the American Institute were received into the new Institute, why the Chapters having charters should not retain their original charters, in order that we may know the age of each Chapter and the date at which it became a member of the Institute. As I understand, it is desired to grant a new charter to every Chapter.

The Secretary: It may, perhaps, be well for me to say one word in explanation of this matter. The Constitution speaks of the reorganizing; that is to say, there were certain changes made in the Constitution and By-laws of the Institute at the time of the reorganization, and it was thought that the new Constitution might in some way conflict with the existing Constitution and By-laws of the various Chapters. When that matter was discussed, it seemed to the Board of Directors that there was no objection to having a second charter, simply as a souvenir or memorandum of this new organization. Of course, the old original charter was never to be taken away.

Mr. Briggs: Before we adjourn to go to the White House I wish to move a vote of thanks to the Hon. John W. Douglass, president of the Board of Commissioners of the District of Columbia, to the Cosmos Club for the courtesies which they have extended, to the directors of the Corcoran Art Gallery, to the Washington Chapter of Architects, and to the architects of Washington, to General Casey, Mr. Windrim, Mr. Smithmeyer, to Mr. Edward Clark, to Mr. Brown Goode, to Mr. Adolph Cluss, to the proprietor of this hotel for the use of this hall and the many courtesies extended, and to the daily press of this city.

The resolution was adopted by a standing vote, and the meeting adjourned for an hour, during which time the convention called upon the President of the United States at the White House in a body.

## THIRD DAY—AFTERNOON SESSION.




The convention was called to order at 12:30, W. W. Carlin, presiding.

On motion, the paper of Mr. Marshall was considered as read and ordered printed in the proceedings, and a resolution of thanks tendered to Mr. Marshall on behalf of the convention for his contribution of his very interesting paper. (Printed on page 38.)

Mr. Stone: The Committee on the Treasurer's Report beg leave to report that the Auditing Committee have examined the books and vouchers of the treasurer and have found them to be correct. They take pleasure in commending the care with which the books have been kept.

The report was accepted.

Mr. Adler: Mr. President, I desire to offer the following resolution:

*Resolved*, That the recommendation made to the congress of the United States, by their supervising architect of the Treasury Department, to the effect that architects for public buildings be hereafter selected by competition, are heartily concurred in by the American Institute of Architects, and that its Fellows and friends are requested to do all in their power to bring about the adoption, by the government, of the recommendation of the supervising architect.

The resolution was seconded and carried.

Mr. Adler: I beg leave to submit still another resolution, as follows:

*Resolved*, That the thanks of the American Institute of Architects and those of the entire architectural profession are due to Mrs. VanRensellaer for her able, fearless and truthful paper upon the relations of architects and their clients, as published in the *North American Review;* and that Mrs. VanRensellaer and the proprietors of the *North American Review* be requested to permit the Institute to cause the reprinting of this article in pamphlet form, for the purpose of distribution of the same among architects and their clients.

There are many of you who have read this article. It is the most telling piece of writing upon the subject that has been published within my recollection. I do not think we can do anything in the way of placing our position, with regard to our clients, and theirs with regard to ourselves, in a better way than by the republication and free circulation of this paper.

Mr. Nickerson: In seconding this motion I would like to add that it seems to me to be proper that we should recognize in some delicate and distinct manner this truly able paper, and the great profit which our profession has derived therefrom.

Mr. Stone: I would like to amend the resolution in this way: "That she be made an honorary member of the American Institute of Architects." I can see no reason why we should not have women as honorary members.

The motion was put to the convention upon the amendment, and it was carried.

The President: The report of the tellers will now be in order.

Mr. Arey: I beg leave to submit the report of the tellers upon the election of officers, place of meeting, etc.

Total number of votes cast, 76.
President, R. M. Hunt, 76.
First Vice President, W. W. Carlin, 43; J. W. McLaughlin, 33.
Second Vice President, J. W. McLaughlin, 39; Alfred Stone, 35; J. W. Root, 1; D. Adler, 1.
Secretary, John W. Root, 51; E. I. Nickerson, 20; A. J. Bloor, 4; Alfred Stone, 1.
Treasurer, S. A. Treat, 51; Levi Scofield, 24; G. Murphy, 1.
Board of Directors, W. M. Poindexter, 76; G. C. Mason, Jr., 52; G. B. Ferry, 49; L. T. Scofield, 46; C. J. Clark, 45; E. F. Fassett, 45; Alfred Stone, 43; M. J. Dimmock, 40; G. W. Rapp, 34; N. S. Patton, 31; G. A. Frederick, 31; A. P. Cutting, 30; J. W. Yost, 27; N. J. Clayton, 23; E. T. Carr, 22; R. M. Upjohn, 6; H. H. Holly, 3; N. Le Brun, 2; E. T. Littell, 1; W. G. Preston, 1.
Place of Meeting: New York, 31; for Board of Directors to select place of meeting, 23; Chicago, 13; Boston, 7; San Francisco, 1; Washington, 1.

Signed:
C. O. AREY, }
J. H. PIERCE, } Tellers.

The President: The place of meeting has not been selected because New York has not received a majority of the votes cast. I will now announce the officers elected for the ensuing year:

R. M. Hunt, New York, president.
W. W. Carlin, Buffalo, N. Y., first vice-president.
J. W. McLaughlin, Cincinnati, Ohio, second vice-president.
John W. Root, Chicago, secretary.
S. A. Treat, Chicago, treasurer.
Board of Directors—W. M. Poindexter, Washington, D. C.; G. B. Ferry, Milwaukee, Wis.; C. J. Clark, Louisville, Ky.; Alfred Stone, Providence, R. I.; George C. Mason, Philadelphia, Pa.; Levi T. Scofield, Cleveland, Ohio; E. F. Fassett, Kansas City, Mo.; M. J. Dimmock, Richmond, Va.

These officers, as you will understand, do not take their places until January 1, 1891.

The question was then put to the convention upon an amendment naming Boston as the place of meeting for the next convention, and the amendment was adopted.

The President: The secretary has received a letter from Mr. Hunt, which he will read to the convention.

The Secretary: A matter which is of special interest to the gentlemen of this convention is Mr. Hunt's statement that he is no longer confined to his room, but must remain in the house for a day or two. He says: "What luck! Everything had been so nicely planned to be with you in the convention. I trust everything is going on well. With kind remembrances to all of the Fellows, I remain."

On motion of Mr. Stone, the secretary was instructed to notify the president-elect by telegraph of his election.

A vote of thanks to the retiring Board of Directors for their services for the past year was passed unanimously.

Mr. Stone: We passed a resolution this morning with regard to persons over seventy years of age becoming honorary members of the Institute and being exempt from the payment of dues. I therefore suggest that in some way, the officers of the Chapters be requested to notify the officers of this association who these gentlemen are.

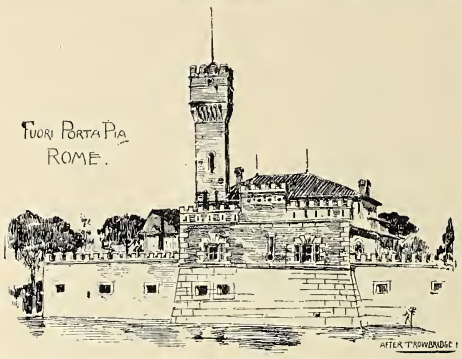
Mr. Briggs: I would move that the secretaries of the Chapters be requested to notify the secretary of the Institute as to those members in their respective Chapters who have passed the limit of age when their dues are remitted and who become honorary members of the Institute.

The motion was seconded and carried.

The secretary read the names of honorary members and corresponding members, and announced that by the action of the convention Mr. Napoleon Le Brun became an honorary member. After a vote of thanks to the ladies attending the convention, there being no further business, the convention thereupon adjourned to meet at Boston in 1891.

## Foundations for Kansas City Municipal Buildings.

BY S. E. CHAMBERLAIN, F. A. I. A.



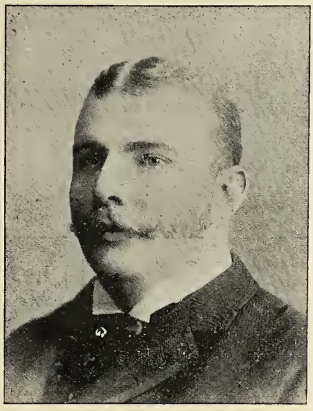

ABOUT a year ago the question of building a new city hall in Kansas City was formally decided upon, the site selected and bonds voted by the people. The common council passed the ordinance authorizing the board of public works to construct the city hall, the site selected being the Market Square, which a few years ago consisted of a ravine running diagonally through the same, on either side of which were abrupt bluffs and hills. But now the bluffs have been cut away and the ravine filled up, making to the casual observer a nice plat of ground; but with a fill of fifty feet under about two-thirds of the building and a solid clay bank under the remaining third, to those that know the possibilities of failure to obtain a uniform bearing for a foundation at a reasonable cost, it is not quite so nice. The "fill" referred to was made at different periods with rubbish of all kinds, tin cans, rock, etc., and for some time this ravine at this point was used as a "public dump," making altogether a most unsatisfactory site to erect a large building upon. The question of foundation for the proposed building was discussed and the board finally authorized me to develop some tangible method that would not bankrupt the city nor endanger adjoining property. Piles were generally suggested, but in my judgment that system would be bad in this particular location, owing to the dryness of the earth in the fill, and the tendency of piles to dry-rot in such soil, and to dig a trench would not only be very expensive but very dangerous.

I finally concluded that a system of piers for the whole substructure would solve the problem, but to dig square holes or pits and crib the excavation would not only be laborious but expensive and dangerous. The cylindrical form of piers was finally adopted, and of uniform size so that the excavation could be done with a large auger operated by steam power, and a three-sixteenth inch caisson could be made to follow the auger. This much being decided upon the question of material was taken up. Concrete was the first to suggest itself, but upon mature deliberation and investigation vitrified brick was adopted as the materials best suited for the filling of the caissons. These brick singly in a testing machine withstood a pressure of 135 to 140 tons to fracture to each brick. The piers, 4 feet 6 inches in diameter, laid in hydraulic cement mortar and grouted solid in each course, and well bounded in all directions across the pier, have proven to be all, for solidity, tenacity and great strength, that my most sanguine expectations had hoped for. The piers are sunk to rockbed of oolite limestone about eight feet in thickness, and are capped with cast-iron webbed plates, on which rest steel "I" beams all bolted together with standard connections and separators, and the interstices between the beams and the excavation of one foot each side and one foot under the beams and caps are filled with concrete. The upper surface is capped with boiler plate one-fourth inch thick bolted to flanges of beams. On this surface the walls of the building are started. The piers under the north wing, tower and smoke stack, and on each side of the main structure, having excessive weight in addition to the ordinary loads imposed on them, are reinforced by twelve-inch "Z" bar columns which also rest on the rock bottom.

The whole system, in essence, is the direct transmission of the entire weight of the solid bed rock by so arranging the interior construction that the whole weight is subdivided, each subdivision being carried by an isolated pier capable of carrying its own individual load. By making these piers of uniform size the load superimposed on each is made about equal by locating them at a greater or less distance apart, as the total weight of the structure is figured in its entirety and this subdivided into loads corresponding to the number of piers required, these being transmitted to walls and isolated columns by the system of steel "I" beams at each floor, thence to the "I" beams resting on webbed cast-iron plates, and thence to the isolated piers and rock bottom.

The substructure of this foundation is completed and is very satisfactory indeed, while the work of the foundation and basement story will be completed by November 1, 1890, and as the work progresses I can see no reason to regret the adoption of the system employed; but on the other hand, I am pretty thoroughly convinced that the system of isolated piers as here used is the most economical, substantial and lasting of any that could be employed under a large building on such a site.

## Personal.



Mr. Lovell H. Carr, the western representative of the house of J. B. King & Co., of New York, whose portrait is given above, will soon be permanently located in Chicago in its interest. His genial and gentlemanly presence has made him many friends among the members of the architectural profession, and at the recent convention at Washington he, accompanied by Mr. Waldron, of the firm, did much to increase the good impression formed through the business which has brought them in contact with members of the profession everywhere. Mr. Carr says it is the intention of J. B. King & Co. to erect works in Chicago in order to supply King's Windsor Cement Plaster more directly than has been possible heretofore. It is claimed for this cement plaster that it is incomparable for plastering walls and ceilings, it containing 300 times more tensile strength, is 200 per cent harder, and requires one-third the labor of lime and hair plaster. It was observed in the Arlington Hotel, Washington, where the new dining-room had recently been plastered, that the drying out was quick and even, and the proprietor explained that it had been put on the green brick and was drying so quickly that six weeks' time would be saved by its use. It is expected that the new works will be in operation in Chicago by April next.

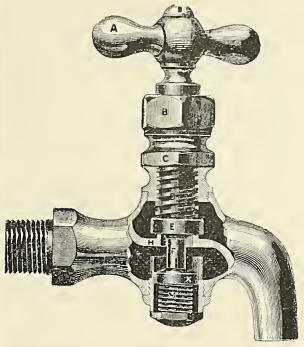
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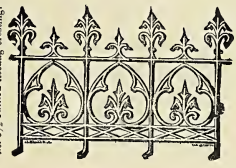
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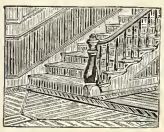
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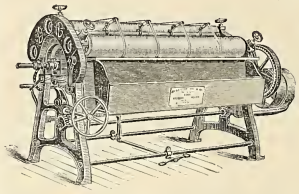
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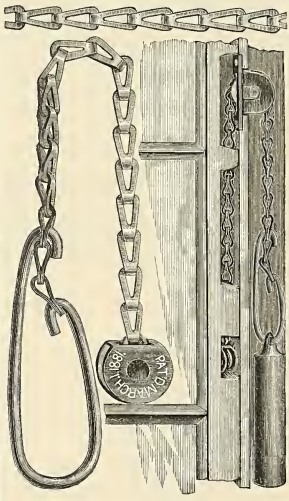


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# THE INLAND ARCHITECT AND NEWS RECORD

Vol. XVI. NOVEMBER, 1890. No. 5

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NOTE.—The term of office of members of the above standing committees terminates in January, 1891.

**Chicago Art Institute Architectural Classes.**

As a result of the first year of the architectural classes at the Art Institute, the work of which may be considered experimental, it was determined to relinquish the evening classes, and to concentrate attention upon the day school. It was found that while the evening classes were largely attended by draftsmen in the early part of the year, the mathematical course had proved too laborious for men who work hard all day. It was evident that the progressive studies could not be made successful in the evening classes, since only the most resolute men would pursue geometry, descriptive geometry and higher mathematics without interruption. The hope of an architectural school, if there is to be such a thing in Chicago, is in those students who can give undivided attention to their studies. The first term of the second year opened Monday, September 29, and the instruction will cover the elements of architecture, namely, the study of drawing, architectural orders and designing, mathematics, perspective, construction, etc. The art school of the Art Institute was greatly crowded last year, and the accommodation for the architectural class proved insufficient. This year this defect is remedied, excellent class rooms being allotted to this department. Mr. Millet is the principal instructor, and Messrs. Otis, Jenney, Root, Pond, Burnham, Ewen and other practicing architects, lecturers.

**World's Columbian Exposition Matters.**

In another month the Committee on Buildings and Grounds of the Columbian Exposition will probably have decided definitely upon the number, size and apportioned cost of the buildings to be erected, all of which must, of course, be done before architects can begin the work of designing. We have not given space in these columns, nor do we intend to, to rumors regarding the work of the committee. Sixty or six hundred acres, for instance, may be filled on the lake front, and three or thirteen buildings erected thereon. When contracts are let for any portion of the work we will announce it, or when designs for buildings are adopted we will publish them. The latest important move made by the committee in this direction since the appointment of the consulting architects was the recommendation of the appointment of a chief of construction, who was appointed by the Board of Directors at its last meeting, November 9, under the following resolution:

*Resolved*, That the Committee on Grounds and Buildings is hereby authorized and directed to appoint Daniel H. Burnham chief of construction at a salary of $12,000 per annum.

The appointment of Mr. Burnham to this office does not in any way alter his position as one of the two consulting architects, his duties as chief of construction being defined as follows:

He shall have general charge of the construction of buildings, supervision of the designs therefor, the preparation of the grounds and the engineering incident to a proper prosecution of the entire work; also have supervision of the buildings erected by outside parties, of the maintenance of all buildings belonging to the exposition company, and shall examine all bids and proposals for work under his control and recommend to the committee for approval such plans as commend themselves to his judgment. He shall organize, subject to the approval of the committee, bureaus of architecture, engineering, landscape gardening, sanitation, etc., and shall be given, subject to the approval of the committee, authority to hire and dismiss all employés in his department and fix the compensation for their services. He shall report to the committee from time to time the progress of the work, and shall perform such other duties as the committee may assign to him.

Mr. Henry G. Marquand, of New York, has been mentioned for the position of art director. If Mr. Marquand

can be induced to undertake the work, the success of the art department of the exposition is assured, as he is probably the peer of all art authorities in this country, with a reputation abroad that would be in itself a guarantee to art exhibitors in every foreign country. The next meeting of the directory will be November 18, by which date the sub-committees will be able to make definite reports.

**The Art Departments of the World's Fair.**

Since the above was written the directory passed the following important resolution, which will become operative upon the approval of the Committee on Buildings and Grounds of the National Commission:

WHEREAS, It is understood by the state and city authorities, as well as by the citizens of Chicago generally, that in locating the exposition part should be placed on the Lake Front; and

WHEREAS, It is believed that such an occupancy by a portion of the exposition will be most conducive to its great and permanent success; now, therefore,

*Resolved*, That it is the sense of this Board of Directors that there should be located upon the Lake Front these items of the Exposition:

1. The Art Exhibit building, which shall contain all oil paintings, water colors, engravings and statuary that shall be exhibited at the World's Columbian Exposition.

2. The Decorative Art building, which shall contain all jewelry, diamonds, watches, gold and silver ornaments, clocks, bronzes, embroideries, tapestries, rugs, Persian carpets, china, bric-a-brac, gold and silver ware, and all other articles intended for the decoration of the person, table or house that shall be exhibited at the World's Columbian exposition.

3. The building in which shall be displayed the exhibit of electrical appliances and devices.

4. Government departmental exhibits, including exhibits from the State Department, Treasury Department, War Department, Navy Department, Interior Department, Postoffice Department, Department of Justice, Smithsonian Institution and National Museum, and Fish and Fisheries Department.

5. Musical Hall.

6. The Water Palace, if any.

7. A portion of certain miniature villages and settlements of curious nationalities, such as Indian, Egyptian, Persian, Central African, Chinese, Japanese, Armenian, Russian and others.

8. An Aquarium building.

9. An electric fountain and other exhibits analogous to the foregoing, or supplementary thereto, and necessary to make the Lake Front exhibition equal in interest and attractiveness to the other portions of the fair.

*Resolved*, That a special committee of four, of which the president shall be chairman, be appointed by the chair to present this resolution to the Grounds and Buildings Committee of the United States Commission, with the view of securing its concurrence in the premises.

It will be noticed that this is directly in line with the general plan as outlined in these columns months ago, and while the number and perhaps the purpose of one or two of the seven buildings recommended may be altered at the suggestion of the advisory committee to which it is referred, the general plan of placing the fine art and industrial art buildings on the Lake Front will be carried out. In regard to the designing of the different structures, it is still too soon to speak definitely, a matter to which we refer because of the many letters of inquiry we are receiving, full information regarding which will probably be given in our next issue.

**Recognition of Draftsmen by World's Fair Directors.**

It has been suggested that the Chicago Architectural Sketch Club be recognized by the World's Fair directors by the institution of a competition among its members for some of the gates, entrances, or other minor details. This would be a graceful compliment upon the part of these gentlemen. The club ranks highest in numbers and skill among the sketch clubs of the country; they are enthusiastic, and many of them stand in the front rank of draftsmanship, as the last two competitions of the New York Architectural League, in which members of this club took the silver medal, will evidence. We would propose that the sketch club present a memorial to the Committee on Buildings and Grounds embodying this proposition. As the honor is more sought than any pecuniary benefit, the details could easily be arranged. The competition need not be confined to club members alone, but it could be adjudicated by the regular committee on club competitions, one of which is a consulting architect for the World's Fair. It is not too soon for action to be taken, and we feel, if the request is properly made, that it will be favorably entertained.

**World's Fair Architectural Exhibit Again.**

Our suggestion that a separate department, if not a special building, be provided by the Columbian Exposition for the exhibit of architectural and engineering drawings and models meets with the following response from a correspondent, Mr. J. J. Murphy, who writes to the Chicago *Tribune* from Edinburgh, Scotland. He says:

I think a separate unique building should be devoted entirely to a display of the models of all the famous buildings and bridges of the world—the Taj of Agra, British India; St. Peter's, Rome; House of Parliament; the Winter Palace, St. Petersburg; St. Sophia's Mosque, Constantinople; Colosseum, Rome, etc., and such bridges as the Forth Bridge, London Bridge, the Rialto and the Bridge of Sighs, Venice; the Bridge of the Holy Trinity, Florence, and Trajan's Bridge over the Danube. The expense of making these models need not be great, as the different American consuls in the various parts of the world could be communicated with, and through them the work could be done by local architects, care of course being taken to use the same scale of measurement throughout. The external design and proportions of the great cathedrals of the world might also be reproduced in miniature. I believe an exposition of this kind would prove an instructive, impressive and gratifying spectacle to our people, and would find a fitting place in an exhibition designed to gather together the beauties and wonders of the universe. How few there are who will ever have the chance of seeing all, or even a few, of these architectural triumphs scattered over the globe, but there is a splendid opportunity of placing them in miniature before the eyes of every visitor to the Chicago World's Fair. A Temple of Architecture is therefore what I would propose as a valuable and useful attraction to the great show.

The importance of a great architectural exhibit as proposed is enhanced by the fact that the buildings, whether temporary or permanent, will be illustrative of American architecture of the period as certainly as those of Chicago are, and it is fitting that the present phases of architecture and engineering of other nations should be shown as far as possible. Placed in the hands of a special sub-committee, an immense display of models and drawings could be collected, and the exhibit would form a connecting link between art and science as illustrated in the exposition.

**Death of A. B. Mullet and the Chicago Postoffice.**

It is singular that at the time Mr. A. B. Mullet, formerly supervising architect of the Treasury department, died at Washington, October 20, another Washington architect, Mr. Adolph Cluss, under orders from the Treasury department, was in Chicago inspecting the postoffice, which had been mainly designed and erected by Mr. Mullet, and was reported in imminent danger of general collapse. While it is probable that Mr. Cluss will report in favor of the demolition of the present building and the erection of another, it is no reflection on Mr. Mullet, who, while not a great architect, built according to the best knowledge of Chicago soil and foundations obtainable at the time. It is not often that one of the heaviest buildings in the country becomes a comparative ruin during the lifetime of its architect.

**A World's Fair Historical Architectural Exhibit.**

An historical exhibit for the Columbian Exposition of all the "habitations of man," as found on this western continent, would be exceedingly interesting. A reproduction of the dwellings of all the American races, Toltec, Aztec, Mound Builders, Cliff Dwellers, etc., and chronologically following down to the tepee of the Indian and the log house of the early settler, would show how this country had an architecture when the world was young that rivaled some of the works of these latter days.

## A Talk on Architectural Style.*

BY IRVING K. POND, C. E., ARCHITECT.

I WISH to talk for a little while on a subject which must be in the minds, more or less, of all who care for beautiful expression of thought, especially as the expression of which I am to speak is through visible and permanent media, and being ever before our eyes ever appeals, sensibly or insensibly, to our esthetic natures. I have a dim sort of an idea of the depth of thought with which a mind like Hegel's would surround this theme, and I can imagine rather vividly with what sentiment and passion Ruskin would endow it. To speak modestly, I am not content to be contained within the limits of either of these eminent gentlemen, and I hope to leave the impression that architecture is more than just philosophy or poetry, but that the philosophical and the poetical elements are so blended as to make a direct appeal to refined, sensitive, self-contained humanity—that is, to civilized man.

I presume architecture as an art antedates the other arts—whether it is the beginning of philosophy I hardly dare to say. Architecture began with man's need of shelter. That this need first arose in the breast of the philosopher, is a question which must be answered in the negative, if the breed of philosophers has not been affected greatly by the workings of evolution's law (as it is fair to presume it has not); for the philosopher always has been a man to receive in unbroken equanimity the visitations of the gods, whether good or evil; who has calmly bared his head to the storm; who generally cared not (or knew not) enough to come in when it rained. Hence the need of shelter could not have been felt first by him.

But the art of architecture, that is, building with the direct purpose of giving pleasure by beautiful forms, did touch men, and then they began to philosophize about it, and the more deeply they thought the more potently did the art unfold its charms. It may be said, to the credit of the philosophers, perhaps, more than to the artists themselves, that they were the first to view art in its correct relationship to the needs of the soul. That was good to the philosopher which gave him a clearer insight into truth and a firmer grasp on the laws which governed the universe. The philosopher never said, "Now, I like that: (consequently) That is good." But he says, "That is good; it gives me a view of things I never had before." Thus that which gives no evidence of inspiration governed by law, is evil to the philosopher. Now to the true artist it is much the same, and he never judges a work from the standpoint of mere whim—of personal like and dislike—but to him, that is good which suggests new motives and impulses; that which adds to but does not duplicate the literature of art; in other words, that which helps him to penetrate farther into the blue heavens of art, and to see suns heretofore unseen to him. I doubt if there is one of us who has not heard the remark, "I don't know anything about art, but I know what I like." What is the equivalent of this in the moral world? "I don't know good from bad, but I know my own sweet will." That sentiment put into practice in the moral world lands one in jail, and in the esthetic world it leads to judgments just as severe. It is in your place and in my place to know about art, or to say nothing about it. It is in your place and my place to know the right from the wrong of every matter with which we have to do, and if one can judge from the joy he experiences when he has learned one good thing at its true value, there can be no hotter hell than the final realization that through life one might have "known" if he had cared less for what he "liked."

No system can exist and remain in permanent operation which does not have law as a base. This is so in our social and political fabric, and none the less so in the esthetic world. Socialism wants everything to be based on law and wants law to be everything. Red flag anarchy wants no law, but rather an absolutely free play of individual selfishness. A reasonable being can readily perceive to what the fulfillment of either of these ideas would lead us in the realm of art; in the first place, a cold mechanical formalism, a fit subject for the speculations of the most pessimistic philosophy; and the other a jumble of discordant passions which would be the death of even the craziest of poets. There is a law in the social and moral world, which warms the cold formalism and puts heart into the mechanism, and that law is "Love." There is a law underlying the world of art, which cools the passions and makes "things work together for good," and that is "Harmony." I do not care now to discuss the moral law, but the other lies at the bottom of all I have to say.

I will try to bring it before you clearly in a few words about a picture with which you are all familiar, "The Angelus." In what lies the artistic greatness of "The Angelus"?—a couple of square feet of valueless canvas and a few ounces of cheap paint! Surely it is not in the deep religious sentiment alone that this greatness lies. I am not speaking of the money value—of what made the stuff sell for so great a price—the expression of religious sentiment didn't do that. I have heard a poor old washerwoman utter a prayer (and, what is better, live in harmony with it, too), full to the brim with religious sentiment and feeling, and if that prayer were written out it would not bring one cent in the market, unless, perhaps, the text were illuminated by an artist. So the religious sentiment itself, or the mere expression of it, does not suffice to give artistic greatness. But what has given this quality is the fact that in the expression the law of harmony has been complied with absolutely. The color, the drawing, the composition, are all bent, in obedience to this law, to the expression of this all-pervading religious sentiment. There is mystery in the sky, in the earth, in the figures. There is sadness in the sky, in the earth, in the figures. There is a reflected light of heaven on the sky, on the earth, on the figures. In this work Millet builded better than he knew, in words. His soul was dominated by the sentiment, but he *called* the picture "The Potato Diggers." But as "The Potato Diggers" the picture was not a success and stood long with its face to the studio wall. There was no special fitness in the hour suggested, in the color, in the composition, to potato digging. That is best done in the dewy hours of early morn, and forms bent in labor, rather than in prayer, are more profitable potato diggers. Someone, at last, saw the picture who had imagination and also had the power to put into words the thought which had struggled up through Millet's mind and had bowed the heads; and then others beside the artist saw that the picture was in harmony with itself and was a work of art! Now the picture was no less a perfect work of art because the man for whom it was painted could not appreciate the pervading religious sentiment, and it was no more a work of art because someone at last did verbally express the religious sentiment of it. In fact, religious sentiment in itself had nothing whatever to do with the work as art. Look at those homely peasant figures. What if in their stead Millet had painted a priest and a nun; would not the religious sentiment have been as deep? Yes, but the background would have been out of harmony. Convent walls and cloister arches are wanted for these churchly people. What if two Parisian lovers had heard the bell as they walked arm in arm through the fields toward their summer boarding place? Their love would have made them sensible to the charm of the situation, and in all honesty and devotion they might have taken the humble attitude of the peasants. But the Paris cut trousers and the Felix gown would have been death to the least shade of artistic harmony. The aisles of Notre Dame are wanted for these Parisian lovers. So it is not the subject nor the universality of the sentiment that lies beneath, nor the depth of the inspiring thought that makes good art. The deeper the thought the more richly and tenderly will it be handled; but the difference is in degree, not in kind.

I dwell so strongly on this point because in architecture the underlying or inspiring idea is generally a purely intellectual one, and ofttimes of such a nature as to be incapable of expression in words, yet none the less tangible to the mind. And to apprehend at all a work of architecture, one must recognize the *motif* and be able to judge in how far the architect has succeeded in harmonizing his material with his idea and in so producing his ideal.

Now this conformity to the law of harmony in architecture we call "style," and it is of that that I now wish to speak. That we may have a common starting point, I will give another and somewhat extended definition of style. Style is that peculiar quality which invests a structure when its various masses and surfaces have been rendered harmonious among themselves, and beautiful to the eye and to the senses; these masses and surfaces being those which higher thought and the uses and necessities of the structure may have determined.

In the first place, and to free our minds of any extraneous matter, we can see by the light of this definition the utter unjustifiability of judging works of art from the standpoint of likes and dislikes. That sort of judgment has already done too much harm in laying down false rules of criticism, by which self-styled critics seek to measure all works of art of whatever quality and kind. This definition shows the unreasonableness of criticism from the outside, but rather requires that one to appreciate the work must get at the center of the thought which dictated the whole. Let a soul stand just on the confines of our planetary system, and, looking straight before him, attempt to pass judgment, and see into what illogical pits he will fall! Close by him whizzes one of the planets, in one direction; away over beyond the sun goes another planet in an opposite direction! and that soul's conclusion is that the system is no system and, being divided against itself, must fall. Now place that soul at the sun and let him watch one of the planets throughout its entire orbit, and I will warrant his preconceived notions will be changed. For that soul, let stand the untutored critic. Then, too, the mind which passes judgment in accordance with its likes and dislikes, generally likes but one sort of thing, and that, bad; for it is a narrow mind and can appreciate no expression of thought which has not struck a sympathetic chord; and even when it can distinguish dimly between thoughts, it will want them all expressed to suit itself rather than the thoughts, or will want all thoughts expressed after the same manner.

I must insist that this last is impossible in good art, but that the expression must vary with the thought to be expressed. Thus, a poetical fancy will not take the same form in words as will a logical statement of fact. Nor does each poetical thought lend itself to different forms of versification. In fact, there is to be found for each idea just that particular form which will best express it, and when one has found that form he has found an element of perfect style, whether in literature, painting or architecture; so that, generalizing broadly in the architectural field, I may say that the architecture of the Greeks took on its definite, pure forms because of the peculiarly definite philosophical cast of the Greek mind, and as this was the national type of mind, the architectural became a national type also. (Of this especial phase I wish to speak later on.) Roman architecture became lavish in its ornament, rich in its materials, and finally impure in its style, because lavishness, wealth and impurity were general characteristics during the empire. And none the less is the Gothic the fitting expression of the unstable religious imaginativeness of the centuries which produced that great style.

I shall not differentiate too closely in this short paper, but will outline as broadly as I can and still present the subject clearly. We will divide the architecture with which the western world has had to do mainly, into two general divisions, the Classic and the Romantic, the one which ended and the other which began with the dawn of the Christian era. As I said, the Greeks were of a very philosophical turn of mind, and had very simple, well defined ideas of art. They

*Read before the Saracen Club, Chicago.

had well defined ideas of life, too, and their gods were as well understood in all their relationships to each other and to men, as are paternal and maternal relationships understood in the family of today. Consequently there was a simplicity in their expressions of concrete beauty which is wonderful, and could exist only in the artistic childhood of the race. Not childhood as regards want of knowledge, but childhood as regards devotion to and belief in the ideal. Simplicity comes only with long study, and may be the crowning charm of a great work of art.

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I know the Romanticists in general do not like Greek, or what is the same, the Classic architecture. To them it is cold, heartless, formal. But they are judging from the standpoint of Romanticism, which is no doubt better adapted to express the thought of today than a pure classic style would be, but that is not saying that Romantic art could have existed for a moment in Classic times. And there were some attributes of Classic architecture of which the Romanticists would better not lose sight. Classic art was never rude and never intruded itself upon the sensibilities of others. Classic art was cold, they say, and self-contained! The most refined and sensitive people rarely express their wildly romantic feelings in public, and classic architects were no exception to this rule. The Greek idea of proportions was always distasteful to the lamented Ruskin. "What good do you accomplish with your proportions," he asks of modern imitators of the Greeks, and the imitators may answer for themselves; but when he asks the question of the Greeks, who, being dead, cannot answer, I answer for them: "Why did the great Creator make a perfect man? Why are the arms *so* long, the legs *so* long and the head of such a size"? There are Quilps and Dick Deadeyes, but I prefer the Apollo. Proportion is not everything in Classic architecture, any more than proportion is everything in a man. The refinement and perfection of the parts is a great factor. The finer expression of beauty was conveyed through the refined and subtle lines which those subtle Greek hands knew so well how to draw and those subtle Greek minds knew so well how to interpret, while the simpler idea was expressed in the relative proportions of the masses. This last proposition is virtually true of Romantic architecture also, though in the highly developed styles the fundamental idea is almost as complex as that presented in the individual parts. Thus, if the wavy line of the pointed arch expressed a certain idea of beauty, that idea need not necessarily be more complex nor less complex than the idea presented by the wavy line of the leaf carving.

However, though the controlling idea in Classic architecture was simpler, or if no less complex, was expressed in simpler terms than was the case with Romantic architecture, in the elaboration and unification, it received all the attention minds peculiarly endowed with a keen appreciation of physical and intellectual beauty could bestow upon it. That, in elaborating the classic idea, natural forms were not imitated nor generally needed, does not argue that the idea is any less beautiful than in the Romantic schools, which resorted constantly and almost generally to the employment of these natural forms. It is a fundamental law of the Romantic schools that nature should be studied as the fountain head of beauty. The Greeks understood this law and did not ignore nature, but they were cognizant of an intellectual beauty or idea of beauty which the Gothic artists never grasped quite clearly. The Venetians recognized it, however, and their architecture appeals to the sentiments as well as to the intellect.

I can hardly go into a discussion of the idea of beauty and its expression in line more than to state that philosophy and esthetics agree that there is a concrete idea of beauty which finds its expression in line. That idea of beauty is less complex when it can be expressed in simple curves, the laws governing which are simple and well understood, as in the circle, for example. And the idea heightens in beauty as it rises in form of expression up through ellipse and parabola, whose laws, though understood, are more involved; up through volute and spiral, whose laws are but dimly known; up finally to the lines of the human body, whose laws are undiscoverable to the esthetic sense. So, taking the feeling which lies at the base of the Romanticist's love of natural forms, we may search among the forms which nature has spread about us with wonderful prodigality for such as will best suit the expression of a conception of beauty which is lying unexpressed in our minds. So that if we use a pointed arch in the expression of our thought, it need not be because it is a natural form, occurring as in a rose leaf, for instance, but because, happening to see it in nature, we recognize a suggestion of how to make concrete an idea which up to that time had lain useless in its abstraction in our minds.

This short discussion of line or form and the idea will make it apparent that architecture has to do with expressions of beauty entirely outside of and beyond the mere sentiment connected with the use of the building. From our definition of style, however, the use must be taken into account in the design of the building, though it be independent of the artistic *motif* which the architect is trying to express. Thus the line of the pointed arch conveys an idea of beauty neither religious nor civic, but what the line expresses may be made the *motif* of the design of either a church or a club house. But it would be as illogical as it is silly to design a church edifice to look like a club house, while the present distinctions obtain between the spiritual life of the church and the social life of the club. When the architect has once selected his *motif*, we must require at his hand a perfectly harmonious expression of it.

To study how this has been accomplished, technically, in the styles which have reached perfect development in the past, will help us the better to understand new work. We will take a few moments to it. The sculptor depends on light from the outside to furnish the proper relief to the parts of his work. The painter depends entirely upon the management of the lights in the picture. Here the arts of the architect and sculptor are alike, and are clearly differentiated from that of the painter; for the architect and sculptor deal with mass, and though the architect ofttimes employs color to enhance the value of his work, it never is after the pictorial manner of the painter, but rather as the Greek sculptors may be supposed to have used color on their images. The architect has to do primarily with mass—a grand mass composed of lesser masses—of solids and voids. Thus we speak of "massing" the architectural features, such as the columns or the openings. In shaping these masses to their use, we have presented to us surfaces each of which must have its proper value just as a chapter or a paragraph in a literary work, and which must be ornamented by proper details just as a plot is ornamented by bits of description, or as a sentence is ornamented and rendered clear and forcible by the use of well-chosen adjectives.

To effect the balancing of parts the Greeks employed light and shadow—solids and voids—the solid being made to cast its shadow on a surface behind the void ofttimes. Light and shade were secondary, and were used in the ornamented parts, and to relieve the deadness of a broad light or of a broad shadow. The color, which undoubtedly was applied to some of the Classic structures, must have been to soften to the eye the glare of the sunlight on the white marble.

The Romans, in their adaptation of classic forms, sought to heighten the effect by the use of colored marbles in broad masses. The Romanesque, which was a transition style, retained some of the traditions of classic shadow, took a suggestion of color from the Roman—handling it in mosaics rather than in broad masses—and employed a new method of construction which soon caused it to develop into those pure styles generally known as Gothic. In the Gothic, color was employed or not, depending on the materials and on the taste of the builders in the various localities where the style reached perfection in one form or another. Color, for instance, did not enter largely into the northern Gothic types, while in the Venetian it was all important. In the Venetian Gothic the tradition of classic shadow lingered, while in the northern it was missing. In the northern, however, spaces filled in with painted glass took the place of classic voids, and the lack of shadow was atoned for by deeply accented moldings, the intense variations of shade in which would have startled a well-balanced Greek. In fact, the Gothic seemed never to get a foothold in the provinces where Greek culture flourished, nor did its influence ever reach as far south in Italy as Rome.

It was in Rome, however, that the spirit of the Renaissance awoke, and, after the dark ages, art and society turned toward the refinement of Greek culture. This spirit was pleasing to the northern architects, after the almost unrestrained exuberance of the Gothic, and they studied to bring the style of the Renaissance to perfect fullness in the north. But the Gothic spirit of aspiration (if you like), of unrest (if you will), had come to man to stay, and though many beautiful works were done in the spirit of the Renaissance, an architecture which would express the majestic calmness of the Greeks would be seen never again on this planet. The spirit of the Renaissance is alive today, and the architect of the future will reconcile the spirit of culture and restraint with the spirit of imaginativeness and unrest, and may produce a perfect style different from what either has produced. But the architect must employ shade, and shadow, and color as long as this planet swings in an atmosphere such as has forever enfolded it, or as long as the sun which gives us light retains its present physical and chemical properties; so that an architecture which does not adorn itself through the medium of shade, or shadow, or color, or two or all combined, is not to be regarded as architecture in the artistic sense of the term.

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Size is not architecture, any more than a petrified Cardif giant is an expression of manly beauty of character. That is, a building may be beautiful and at the same time grand in size—like St. Peter's with its dome, in which the curves are none the less subtle in spite of the magnitude—but magnitude does not constitute beauty.

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I am asked, sometimes, "In what style is that building?" and generally, when the question is asked in reference to some modern work, I cannot answer that it is in any of the historic styles that has gained for itself a specific name. Nor is it necessary that a building to possess style should conform to the laws of past architectural work. It is enough that the building should possess style; that is all we can ask of it. That intangible essence, "the spirit of the age," acts powerfully, though, perhaps, unconsciously to the workers, through more or less all the work of a certain period; and periods which have been marked by definiteness and directness of thought in other branches, have been fruitful in perfecting general architectural styles.

But that does not absolutely preclude the possibility of a personal style, that is, a style developed by one individual, especially in an age so marked by heterogenity of religious, philosophic and artistic thought as is this age of ours. In any age, it seems to me, exhibitions of strong personality are to be received with gratitude and as marks of genius when the thought is well directed, for it is easier to copy or to imitate work already done than it is to perfect a style along individual lines. In fact, the period of well-directed individual effort is the most vital in the life of an art.

The "race spirit" is so strong in some instances as to cause the race to act almost as an individual. The Moorish race is a good example of this, and its history is interesting to show against what adverses and over what obstacles an individual as well as a race has to struggle to be able at last to formulate his idea of beauty and to express it in a perfect style. I will give a sketch of that race's history.

For a long period after the dawn of the Christian era Spain was a Roman colony, and the Roman standards were planted at the very gates of the setting sun. Everywhere justice was administered in conformity with the Roman law, and in the centers of population Roman

civilization was as advanced as upon the seven hills themselves. The Romans were not (then) a proselyting people, but they carried their religion with them wherever they went and erected temples to their gods among the conquered peoples. Their temples were not destroyed when Roman Spain was overrun by the Visigoths and the Vandals, for the religions of these barbaric races did not require a system of worship in temples made by hands. Their gods did not need a setting of beautifully polished stones and rarely carved marble capitals. Their gods smiled or frowned from a rough stone altar set up in a grove of trees. Thus the trunks of growing trees were the pillars of their temple and the great dome above was its roof. The open air quality of the religion of the invaders may well account for the fact that so many of the Roman temples remained nearly, or quite intact when the warm Arabian blood overflowed the bounds of Africa and rushed with resistless force over the peaks of the Sierras and down upon the sunny plains of Southern Spain. The barbarism of the Vandals was swept away and the civilization of the Mohammedans began to grow in its stead. These Mussulmans were a proselyting people, and as the blood of conquered races was absorbed by their richer blood, the laws, the customs, the religion as well, bore the impress of the strong Arabian stamp. The Roman temples which the Vandals had spared were so many quarries for the Arabian builders, who used the beautifully polished shafts and the delicately cut capitals for the adornment of their mosques.

At Cordova there remains in good state of preservation today a wonderful building constructed by Arabian builders of marbles from Roman temples — a wonderful building called the Marble Forest — a monument to two great civilizations. Not long after this mosque was erected, Christianity came into Spain, and the Arabians who had swept away the old barbarism felt the force of this new civilizing power. The Mussulmans were forced to the south. They took their stand where the towers of modern Seville lift their heads, and for many years the stronghold of their civilization was here. The great Geralda, or bell tower, and the Alcazar, or royal palace, remain as monuments to that time. In the Alcazar, the influence of the Roman builder is but little felt, while the work of Moorish hands becomes apparent. The cubiform capitals and slender, white marble columns are evidences of Moorish influence, as are also the interlacing traceries of the wall decoration. The color combinations, too, in the Alcazar are suggestive of what was done later in the Alhambra. But while the Moors and Arabs were at work together, setting a brilliant jewel in the crown of the civilization of the south, the Christians were pressing upon them, and again this power was victorious. The Mussulmans were pushed to the base of the Sierras, and there, on the sunny plains of Granada, they took their final stand, and there their civilization reached its most exalted plane. There their arts and letters were developed to their highest beauty, and their architecture to its rarest purity. One who has not seen, cannot understand the beauty of this last work. In architecture, the coarse elements all had vanished, and the Moorish idea of beauty showed supreme. In public and in private work alike it showed, but its highest expression was the Alhambra.

The crystallized idea of the Alhambra stands in the center of that arcaded court, so famous for its beauty — the Court of the Lions. It is a fountain with a pure white marble basin resting on the backs of twelve white marble lions. Crystal water from the heaven-kissed ice peaks of the Sierras flows from the fountain and gushes from the lions' mouths, falling and splashing on the broad, cool slabs below, whence it runs away in shallow channels to refresh the air of other courts and apartments. That, I say, is the ideal, the crystallized idea of the Alhambra; that fountain, with its pure marble and its cool, flowing crystal water, is the spirit of beauty caught and held for men's eyes to see and men's hearts to feel. This race's history is the history of everyone who is struggling to attain the ideal. Listen! Mohammedan art would never have reached the heights it did had the Arabian blood been allowed to run sluggishly through undisturbed days in Cordova. Nor were the peaceful musical days at Seville sufficient to touch the clearer chords. It took struggle and bloodshed — yes, defeat and flight to Granada, to the new standpoint — to cleanse the style and give birth to the Alhambra.

I have touched upon this particular style, not because it is the most beautiful of all architecture, for it may not be, to our modern minds, but because it is easy to trace its course from its early beginnings to the final full development. The Venetian architects designed in a spirit much more in harmony with what are now our ideas of beauty, and combined to the fullest extent the elements, shadow, shade and color. And this will be a test of great architectural skill with us as time advances, for the highest powers must be employed in combining and harmonizing these distinct elements. The difference in the effect produced by one, or by a combination of the three, may be likened to the difference in effect of a single finger exercise or a symphonic variation, where all the force and technical power of the artist is called into requisition.

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To sum up: Fully and rightly to apprehend a work of architecture, we must get near enough to the thought to know what the artist was trying to express, then we must get far enough away from the object to be able to see if the thought has been expressed clearly, in general terms. Then we may come nearer and see if secondary ideas, and those which ornament and explain, all have been brought into harmonious relationship with the moving idea. But, first of all, we must put ourselves in the background so that ourselves shall not get between us and the object at which we are looking; that is, if we happen to have a natural instinct to love blue above other colors, we must not condemn an architect for using yellow, if yellow best suit the expression of the conception of beauty he had in mind. In a word, to be fair critics, and really to appreciate and enjoy beauty, we must shelve ourselves.

## Thoughts on Architecture.*

BY FREDERICK BAUMANN, F. A. I. A.

OF deep interest in the history of art is the description of the ancient Tabernacle given in Exodus xxv to xxviii. Moses is commanded to take from the people an offering, gold and silver and brass, and blue linen and purple, and goats' hair, and rams' skins died red, and badgers' skins and shittim wood, oil for the light, spices for the anointing oil and for sweet incense, onyx stones and stones to be set in the ephod and in the breastplate, and to build thereof a tabernacle as minutely described. This sacred and most costly tent was, as we know, moved from place to place as occasion demanded, lastly to be supplanted by the far more splendid temple of Solomon.

What is most interesting to us is its peculiar ornamentation. Its wooden parts were of the best of that material known, yet all were wholly enveloped with plates of pure gold. It has curtains of the most artistic fabric, "a vail of purple and blue and scarlet, and fine twined linen of rare and cunning work, with cherubims, shall be made." Silver was used on the columns of the court, which were with brazen feet. The court gate had a hanging made "of blue and purple and scarlet, and fine twined linen wrought with needlework." We are left ignorant whether the gold was left plain and bright, or whether it had been covered with handiwork of any kind, or even some other material, be this wax or varnish, intended to tone down the original excessive luster of the gold. Yet the description spurs the mind to more deeper investigation, and leads speculation back to the very origin of art.

The first origin, or, if you prefer, the first invention of art must be presumed to have been the work of primitive man at an age infinitely remote and perhaps prior to the invention of speech. He found the textile products of nature and intertwisted them in useful fabrics, beginning with the plainest and simplest. Follow by degrees the art of braiding, stitching, weaving, lacing, and what else there may be of the kind. The principle, the style of these arts is a simple or a more complicated flat pattern, without relief, any more than must result from the thicknesses of threads of tapes therein used. It represents a drawing of one or more geometric designs, singly or in endless repetition.

Later on, after the properties of moistened clay had been observed and fire had been utilized in the process of hardening, bodily objects were formed, soon to be dedicated to sacred use and become variously ornamented. We find that all the ornaments invented with textile products are as they were, or transformed into bodily shapes, used and incorporated upon the exterior of the vessels. Added are representations relative to the animal world, which grow into sundry forms of fiction.

Thus, probably, for many centuries existed textile and ceramic arts, before any occasion was found for the art of building. But whenever at a later time architecture came into existence it stood upon no other ground than the one cultivated prior to it. How could it stand upon any other? It results that we must seek the enigma of original forms of architecture in the sister arts prior to it, which had fruited the soil from which it originated. Thus it came upon the world as a natural child, and it is in vain for human reason to attempt the fabrication of any originally new system of it. This has been tried, and ever has been buried with the "inventor" or prior to his demise.

Architecture has its own special language. Its works narrate their history. Were this possible in a language which has not been transmitted from generation to generation?

Architectural construction, according to Semper, bases on four constituent parts: The fireside as center; the protecting roof; the circumvallation; the substruction. From these originally very modest parts the temple bases its origin. It starts with the simplest wood to become the finest marble structure. The sacredness of the purpose demanded the best material at command. And this did not suffice. Even the finest and at the time the most appreciated of wood materials, the cedar of Lebanon, had to be ornamented and wholly covered with metal, precious gold not excepted. To this fashion, which must have been at the time thousands of years old, we find the tabernacle gorgeously ornamented as related in scripture.

Its partitions were mere curtains of the most precious kind. This most original fashion of partitioning off was retained by Solomon in the gorgeous construction of his stable temple. Palaces in olden times had partitions merely fashioned in this style. The king was equal at least to a demi-god and was entitled to fashion his domicile accordingly. Even in later times we find partitions thus made. Think of Polonius stabbed by Hamlet when listening behind a partition made of cloth.

But partitions were, with the process of culture, made of solid material. Yet, wherever they thus appear, they are not artistically treated as structural parts. They are decorated in a manner to represent curtains, and at no time become an expressed mechanical element. Do we not at the present day decorate the entire within parts of an edifice exclusively in this fashion? Can our papering and fresco-painting be taken as anything but a sham of the original curtain? More correctly do we work with gobelin tapestry, the designs of which being stretched upon wooden frames, and thus secured to the wall. The partition proper, however, bears no artistic relation to the art of any such decoration.

Empaistic art, i.e., the art of covering structural wooden parts with costly metal, did by no means remain on first principles. The glare of plain gold upon large surfaces was soon found offensive to

*A lecture delivered before the American Institute of Architects at Washington, D. C., October 23, 1889.

the eye. Designs were wrought upon and into it, and its surface was covered with wax transparent enough to allow a subdued show of the metal. Precious gold covered with mean wax! Can this be possible? Can this be art? According to Ruskin, in the meaning of his doctrines, it should be called barbarism, but in accordance with the principles by which ancient art was governed, it was true art which in those times knew of no construction as such. As well might we speak of the construction of a large block of stone or marble for purposes of a large statuary work. The material is secondarily considered; was a mere matter of necessity for mechanical being.

We have a right to assume that the woodwork of the great temple at Ephesus, destroyed by Herostratus, 356 B. C., had been empaistically treated. How could it burn without wood, and why should such wood have been left bare, contrary to the fashion of art prevailing at the time of its first construction?

Later on we find empaistic art, with a new method, taken up by the sculptors, who, as for instance great Phidias, employed on their statuary wood, ivory and gold, the latter unquestionably deprived of its natural luster. Thus we find an art, barbaric in its origin, transformed into the highest art that ever distinguished man's ideal mastery over nature.

Greek art, however, began early to utilize building stone as a current material. The first stone quarried was a poor sort of oolitic limestone, called poros stone, which received a covering of plaster made very smooth for purposes of imitating, as must be presumed, as nearly as possible, the former covering of the wood with metal. Column, pilaster and wall thus plastered were then correspondingly tinted and waxed. Later on the celebrated Pentelian marble was quarried and used, to be tinted by the painter without the employment of stucco. For with this fine material the work could be wrought to absolute mechanical perfection, fit to afford the painter a surface more polished and more true than could formerly be obtained by plastering the poor stone. It has become evident beyond doubt that this marble at no instance remained without its due tint, probably at first the very one originally obtained by tinting and waxing the metal in various degrees and shades. The tints evidently were necessary in an esthetic sense to gratify the exquisite good taste of the ancients so generally acknowledged. Not only the temples, all statues, as it appears, were also tinted. Modern archæologists, besides, will have it that this tinting was a universal rule also in the days of the Roman Empire.

We modern people stand here as before an insoluble enigma. We expressly leave our better buildings and all statuary with the original tints of their material. Many arguments have been had on this subject, but the decision has—universally so—ever preponderated in favor of our fashion. Possibly at a later day the true tints may be discovered which may convert our taste and ourselves.

From the above premises it would seem evident that, as already indicated in Greek architecture, the material is nothing and the form is all. The temple is a unit without parallel in the history of art. Semper says in an article, "Original Elements of Architecture and Polychromy," "Comparing the various styles of architectural history we are met by the idea that all are based on very sound principles of statics and mechanics. One of the nations, however, succeeded in imparting organic life into their architectural creations and their industrial productions. The temples and monuments of Greece are not built, they are grown; are not merely ornamented, like the temples of Egypt, with organic bywork; their forms are such as are produced by organic life in its strife against gravity and substances. Otherwise we fail to comprehend or explain the incomparable beauty of a Greek column."

The age of architecture in which we live, however, is emphatically one of construction, so that I find myself induced to give here some facts of what to the Greeks was mere bywork, the construction of the Parthenon, taken from a comparatively recent work of Adolph Boetticher, entitled "The Acropolis of Athens." According to measurements the walls were six feet thick with alternate courses of two and two feet in height. One course consisted of a solid block six feet wide; the other of two parallel blocks each two feet six inches wide, leaving a vacant space of one foot between them. They were doweled into another and anchored with heavy irons carefully inserted. The drums of the columns were six feet in diameter, four feet high, connected with each other by means of central stone dowels. The sacredness of the building prohibited the use of mortar and the blocks, most carefully and precisely wrought to form by the hands of skillful mechanics, were set dry one upon the other, and this was done without allowing the occurrence of any sort of spawling off. Considering the extreme difficulty of thus setting course upon course, and the high degree of perfection in which the mutilated remnants appear at the present day, we must bow deeply with respect before the mechanics who accomplish this, be this with tools even more accomplished than ours. Yet perfect, absolutely without blemish—as must be judged from remaining ruins—as this work was, the consideration of this particular quality bore no weight; it was a matter of course—of no special account. The building was a work of fine art in the widest as well as in the narrowest sense of the word. The like of it, on the scale of high art, as on the scale of mechanical art, can nowhere be found, and it must unquestionably be placed at the head of all buildings ever erected in this world in any age. This Parthenon served for 1,000 years as a Christian church till taken by the Turks.

The founding of Alexandria gave origin to the ideas subsequently followed by the Romans, whose practical genius adapted Greek architecture to the multifarious uses coming in demand. The Basilica and the Pantheon find existence, either one a prototype of subsequent Christian churches, the former for the West, the latter for the East. Constantine is credited as the author of a thousand churches with small central domes. But not until under Justinian a new and original form was inaugurated. I refer to the Hygia Sophia at Constantinople. Its originality consists in the circular dome over a square room with adjoined extensions toward the four sides. This huge edifice, celebrated for its then originality as well as for its mechanical perfection and size, was completed in the amazingly brief space of five years, while it took 160 years to complete St. Peter and forty to build St. Paul, to say nothing of the Gothic cathedrals, most of which were left uncompleted.

The Basilica arch became the type of the Romanesque style, so called, samples of which are principally scattered over Germany and France.

When the Christian spirit, as then understood and reigning, had more and more alienated the human mind from this earth; when it had reached the hearts of the masses in a measure to inspire them to march to the Holy Land for the liberation of Holy Jerusalem from the yoke of infidel Mohammedans, which march they carried on and followed up in a most reckless and unwarlike manner to their own and to the ruin of millions to follow, then had arrived the time for the Christian mind to be not satisfied with the height and extent of churches as they were. Roofs and spires were to be raised up to the clouds to satisfy a most general demand. Arches were consequently made pointed to gratify this desire, and thus churches became the grandest edifices in existence. When we consider that the idea of grandeur has ever been a captivating one to the human mind—even regardless of higher considerations—we must contemplate, with due respect, the admiration and awe with which these edifices were and even are now regarded, though it is due to us to be conscious of the fact that they are productions of what we call "Dark Ages."

The cathedrals are essentially constructive in all their being, but they fail in construction, because too complicated in detail for the means then at command of man. Hence the great number of uncompleted edifices and the early decay of the comparatively few which were, at least in a measure, completed.

Mechanical art of the present day begins to be able to master buildings of this character. The central tower on the roof of the Cologne cathedral was first erected about forty years ago. It is taken down today because frail and fast decaying, to make room for the construction of a wholly new tower, of identical exterior, on approved modern principles.

The Renaissance, i.e., the period of dissolution of medieval ideas and customs, and the quickening of human thought with the fruits of ancient culture, which gradually followed the crusades, completely overthrew the architectural conceptions of the Middle Ages. Classic architecture of ancient Rome was brought to life and cultivated in higher degree.

Renaissance ideas waning, history proceeds with style and fashion after fashion, till it arrives at classic Renaissance, so called, inaugurated by Winkelman and Stewart and Revet, for a time followed by architects in all countries, of whom Schinkel at Berlin was evidently the most conspicuous and refined. He is the father of a number of celebrated buildings. They were but poorly constructed from regard for the then reigning poverty of the country. And his greatest, most original, truly classic designs of rare beauty were left unexecuted. Schinkel was one of the few architects who understood how to impart life into a Greek column, while generally the same appear like mere corpses, telling a form carefully constructed in accordance with Vitruvius' rules, yet without the spirit of true art which alone gives them life.

Thus subtle are the forms of Greek architecture, in most direct distinction from Gothic, which rests on a mechanical basis, that the positive correctness and harmony of all parts of the structure must come, as it were, like a revelation to the well-trained eye of the architect, as much, and perhaps more so, than must the true expression of a human face reveal itself to the artist painter who undertakes to cast it upon his canvas.

Greek architecture, in its true bearing and compass, is a subject which cannot be mastered by superficial study. On the continent of Europe its acquirement belongs to the necessary requisites of a student desirous of introduction into the profession. In England and in our country, however, it is treated with a sort of levity, as I believe. This should become otherwise.

Younger architects, in particular, should set at work to become acquainted with the lofty secrets of Greek architecture, not that they might be led to strictly follow it in their designs, but that through its study their minds may become elevated far enough above the common level to enable them to impart life to their designs, and thus give them a character of a higher nobility.

The spirit of Greek architecture is, and should be acknowledged as being, one of the greatest treasures of common humanity.

A myth has it that at the erection of a sacred temple at Naegara the god seated himself upon a rock, thence inspiring the workingmen with the tunes of his lyre. Subsequently the rock sounded in like tunes upon the touch of a wand. Be to you, Greek architecture, this tuning rock when, with heart and spirit, you touch it!

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"Black and White," Vol. I, No. 1, an insurance magazine issued in the interest of policy holders, has reached The Inland Architect table, through the courtesy of the publishers, Kellogg & Collings, Chicago. It is a handsomely gotten up magazine, filled with interesting and instructive matter, covering all lines of insurance, and has a number of novel features, among them a listing of the several states, showing the names of the companies doing business therein, together with the standing of the same. Each list is headed by the name of the insurance commissioner of the state. Its name is unique.

## Influence of External Conditions on Architecture.

THIS formed the main subject of the first of a series of lectures on the History of Architecture, delivered at the Heriot-Watt College at Edinburgh on Monday last by Mr. G. S. Aitken. The following is a brief outline of the main points of the lecture as summarized by *The Builder*:

The lecturer referred to the various possible sources of the origin of architecture, such as the *tent*, the *cave* and the *burial-place*, and mentioned seven conditions which had determined its various forms. These were: 1. Climate; 2. Scenery; 3. Location; 4. Material; 5. Tools; 6. Race; 7. Religion.

A country may have the most genial climate upon earth, but if it be such that the land brings forth spontaneously, and people have only to sit under their vine and fig-tree, the ripe fruit dropping into their mouth, so to say, the mental faculties will in such too favorable circumstances remain languid; with no inducement to physical exertion there will be little or no art culture. It is quite true on the other hand that the labor required to maintain a race may be so excessive as to crush out all liking for art. We do not expect to find it fostered in the sweating dens of any of our great cities — indeed, we hardly look for it where toil is more moderate in its demands, as in the instance in Gray's elegy of the "Ploughman homeward plodding his weary way." Mental exertion is not possible to the physically weary man. If he wishes to find satisfaction in art it must be through the medium of others, who may be able to act as interpreters to him. All other things being equal, an equable climate is most conducive to the progress of art. Labor under propitious skies is necessarily less arduous for the body than toil in fitful climes. Man under such conditions has a due amount of leisure for art pursuits and is physically in a condition to follow them with pleasure.

But what if he have no stimulus to mental activity from the scenery around him? Suppose the country be as flat as a plain or as dreary as a desert. Though the climate be agreeable, yet if the scenery be unimpressive, we cannot expect to find in such a region the highest developments in architecture. It may be good, but at the same time unimaginative and ponderous.

Egypt will furnish us with an apt illustration of the truth of this — a fine rainless climate, no scenery such as we understand it, but the bare syenite and limestone cliffs of the Arabian desert to the east and the African watershed to the west; no clouds to suggest the grand forms of peak and dome; the sun rising into the intense cloudless blue and setting as he rose in a ruddy haze which makes him like a ball of fire. What is there in these physical conditions to produce the highest forms of art?

A third element is *location*. A center of civilization may be in the heart of an inland country, its influence not extending beyond that country; or it may be on the sea-coast, where by maritime intercourse it may be in touch with many lands. In the one case the art resulting may be expected to be essentially provincial; in the other, generous and eclectic, displaying variety, energy and character. As illustrating this, Indian architecture, as it was before the irruption of Islam, may be taken. Gorgeous and labored, it is an exotic in art which could thrive in no other land, because there is nothing within it with which the people of any other country can feel sympathy.

How different with the lands on the northern shores of the Mediterranean. Take which country on that coast we may, there is always something in its architecture which can bear transplanting to other lands, because its roots are down in the soil of common principle, and in this way its foliage may, in a figure, be said to be for the art healing of the nations.

*Material* is the next matter we take into account. We can imagine the desert of Sahara becoming by irrigation fertile enough for occupation, but we cannot see what prospect of building there could be even if the dwellers there had all the ambition and energy of a Nimrod. Tent-dwellers they must perforce be, for in so tropical a clime, and without a "boundless contiguity of shade," they could not afford to lose a single palm-tree to help in erecting so much as a solitary hut.

We see how much material had to do in the development of pointed architecture. If it had been a style depending upon large cubes of stone it would soon have reached the end of its journey, but as the principles of its construction permit, indeed, encourage, the use of blocks of moderate size, its progress was assured wherever stone and brick were available.

An abundance of *material* without *tools* to shape and weld it would avail nothing for the formation of a style of architecture. For just as the invention of type printing has developed literature, so the invention of tools has loosened the bonds of the genius of architecture. With hammer and chisel the mason can make the rough stone shapely, can revel in all the intricacies of molded work, forming here a mystic hollow and there a living line of light; he can garnish a frieze with a reminiscence of the flowers he saw in some woodland nook or on mountain side; or he can crown the shaft with the semblance of leaf and flower with "lithic" birds embowered therein. All this and much else can be done because of tools.

A more important and determining factor in architecture is that of *race*. But who can explain how it is that the art of one race shall be of a higher type than that of another; that the works of the Greeks should stand head and shoulders above, say, the art of the Hebrew race? An attempt to solve this would be like an effort to discover the principle of life in plant or man.

Our seventh formative condition is *religion*. Turn to what land we may, and survey in imagination its architectural works, its religious buildings occupy the first place, whether in point of scale, dignity or elaboration; so that it may truly be said that the history of architecture is mainly the history of the shrines of religion. And we find the noblest works of this department of art associated with those forms of religion which are the most spiritual. The Greek temple is a masterpiece of intellect, but it clings to the earth, and is, as its horizontal lines suggest, of the earth — earthy; on the other hand, the mediæval cathedral soars heavenward, as it would claim kindred with worlds beyond, and is undoubtedly the realization of all that goes to make truly good architecture.

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## Chicago Hydraulic-Press Brick.

THE extensive use of St. Louis hydraulic-press brick in the Chicago market, with which Mr. J. J. Lockwood has been identified for almost twenty years, and latterly Mr. C. P. Kimbell, under the firm name of Lockwood & Kimbell, led to the recent purchase of extensive tracts of land at Porter, Indiana, and the establishment of a hydraulic plant there under the name of the Chicago Hydraulic-Press Brick Company. Upon the completion of the works, the firm chartered a special train and invited their many friends among the architects and contractors to visit them.

The invitation was responded to by some 260 representative men from among the leading Chicago architects and contractors, and proved to be not only a social, but an investigating company, thoroughly interested, and most of them, at least, not a little surprised at the unexpectedly fine equipment and extensive capacity of the brick yards.

The six coaches furnished by the Michigan Central Company were comfortably filled but not crowded, and the buffet car, where substantial and first-class refreshments were served, was liberally patronized during the latter half of the down trip. The location of the plant is at Porter, Indiana, forty-four miles southeast of Chicago.

Among the well-known architects present were Messrs. W. L. B. Jenney, Treat & Foltz, Furst & Rudolph, W. W. Clay, L. D. Cleaveland, W. W. Myers, W. F. Barnes, of Joliet, and others, and from the satisfaction they expressed, both as to the quality of the brick and the admirable way in which it is made, these gentlemen will no doubt specify many millions of these brick in future Chicago buildings. The St. Louis Hydraulic-Press Brick Company was represented by its assistant secretary, Mr. Louis Chauvenet.

The company own, close to the little village of Porter, 450 acres of the finest clay land a brick maker could desire. The clay lies almost directly at the surface and extends some nine feet deep, being, so far as examined, entirely free from stone or pebbles. The clay is first loosed by a plow resembling an old-fashioned cultivator, and is then taken up by a unique iron revolving cart so constructed that as it moves over the ground it elevates the loose clay and deposits it in a central receptacle. As soon as the box is filled the elevators are stopped by disconnecting them from the wheel, and the cart is driven to the top of the storage sheds and dumped. The clay is thus housed to dry and season, or as Mr. Kimbell expressed it, "It is full of organic matter and we leave it there three months to die." When seasoned it is taken to the crushers where the dry clay is reduced to a powder, elevated and dropped into the huge, powerful hydraulic presses. These presses are quite a marvel in their quick, silent, efficient operation. They are gauged to press 3,000 pounds to the square inch, but have a capacity of 5,000 pounds per square inch. As one surface of a brick has about thirty square inches some estimate can be formed of the pressure used in forming each brick which is pressed from above and below. All but the ornamental brick are taken directly from the press to the kilns, ready for burning. They are left in the kiln five or six days and are then subjected to an intense red heat for six days longer, when, as soon as cooled, they are ready for the market. The ornamental and irregular size brick are first taken to the dry rooms, to render the angles and corners less liable to chipping in handling, before they are burned. The capacity of each press is from 20,000 to 30,000 pressed brick per day.

The steam that furnishes power to the engines and pumps that operate the press cylinders is furnished by three 240-horse power boilers. The same steam also supplies power to the dynamo that supplies the electric light to light the buildings, heat for the drying and fuel for the fires.

The fuel was one of the most interesting sights to the visitors. The fuel is crude oil and steam. The oil is brought in pipes to the entrance of the furnaces from storage tanks located at a distance from the buildings. To start the first fire under the boilers crude oil alone must be burned. But as soon as steam is generated, the steam enters through a pocket just back of the oil flow. The force of the steam jet surrounding the oil seems to vaporize the oil, producing a fierce, steady, uniform fire and absolutely perfect combustion.

In the same way heat is supplied to all the kilns. To prove the perfect combustion, one of the kilns, which was just being emptied from its first firing, was examined with much incredulity at first. The interior walls were as clean as when new and showed no signs whatever of the six days' terrific fire to which they had been exposed. One architect was heard to ask if this kiln had been burned or had the brick been stacked in it for show.

In the kiln room are fourteen great kilns, each kiln holding 138,000 bricks. The entire absence of coal, coal dust, ashes and smoke gave an uncommonly cleanly appearance to the entire establishment.

A little east of the kiln rooms, and alongside the railroad tracks, is the storage shed, 300 feet long and 65 feet wide, capable of holding four and a half million pressed brick. Another shed of the same size is to be erected at once, making the storage capacity 9,000,000 pressed brick.

Messrs. Lockwood & Kimbell intend to be prepared to handle the largest contracts and be ready to supply at short notice a million or

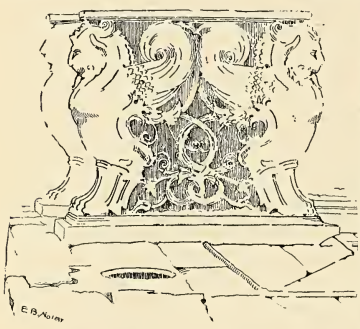
more of brick to any one who might need them. They will be in splendid trim to supply brick for any and all of the World's Fair buildings and cause no delay for lack of material.

The total capacity of the works is 210,000 bricks a day, of which 130,000 are pressed brick and 80,000 common brick. When running at full capacity they employ 230 men at the works. The works represent a cash investment of about $200,000.

The immense impetus that will be given to building operations the next year or two, on account of the location of the World's Fair, adds interest and importance to such a plant as Messrs. Lockwood & Kimbell have established and they are deserving of credit for their enterprise.

## Chicago Architectural Sketch Club.

THE two closing meetings of the club year were important. That upon October 6 was largely devoted to the reading and discussion of a paper upon the manufacture and use of steel in building construction, by architect W. L. B. Jenney, of Chicago. The announcement of the close of the competition "Rendering from Photograph," the report of the Adjudicating Committee and the exhibition of the fourteen drawings followed the reading of the paper. The contestants were "Sir X" by Oscar Enders, "A" by W. R. Gibb, "Sandy" by E.C. Jensen, "O. K." by Emery Roth, "Vater" by A. Y. Robertson, "McKinley" by P. Parmentier, "Titus" by Arthur Heun, "Boz" by F. L. Linden, "Bobolink" by C. B. Schaefer, "Stone" by H. J. Ross, "Fac Simile" by H. F. Swanson, "Felix" by P. C. Stewart, "Hurricane" by G. M. Russegue, "Maiden Effort" by J. E. Youngberg.



The report of the Adjudicating Committee is as follows :

"RENDERING FROM PHOTOGRAPH" COMPETITION — CHICAGO ARCHITECTURAL SKETCH CLUB.

*First.* "Sir X." Broad, and reproducing more nearly the tones of the photograph than any other submitted. We like the reticence he has used in rendering this, and some of the unusual methods of handling the penwork. He has wandered too far from his copy in his trees and foreground, in not giving proper relations of trees between these and buildings.

*Second.* "Sandy" and "A" in a "square." Designs submitted by "Sandy" and "A" in a "square" we consider of equal merit for different reasons, and place them both second. The design marked "A" is in some respects a more faithful rendering of the photograph, but the faults in photograph are exaggerated in the spots on the building. The design by "Sandy" shows better penmanship and better treatment of the building, but the relative value of the trees, water and buildings is not maintained as in photograph. His tree work is very good, though not like photograph.

*Third.* "O. K." would have had an earlier mention had he adhered more closely to his copy. He has produced a very pleasing "Albert Durer" effect, giving almost the character of a wood engraving.

*Fourth.* "Vater." Design by "Vater" is too black and smootchy. The foliage at foot of the walls is completely divorced from shadows.

(Signed) W. L. B. Jenney,
J. L. Silsbee.

I entirely agree with Messrs. Silsbee and Jenney. Upon the whole it seems to me that the drawings reflect great credit upon the sketch club.

(Signed) John W. Root.

October 16, 1890.

The sixth annual meeting of the Chicago Architectural Sketch Club was held at the club rooms November 3, about thirty of the sixty-two active members being present.

President William Bryce Mundie occupied the chair, and opened the meeting with a short address in which the work of the year was reviewed.

Secretary William R. Gibb submitted his report in which the general events of the year were commented upon. He spoke highly of the work of the Adjudicating Committee, Architects Root, Jenney and Silsbee, and their interest in the welfare and progress of the club. The secretary recommended that the club take a vacation during the months of July and August.

In the competitions of the year, in that for "A Village Smithy" (fourteen drawings) and "Artist's Home by the Sea" (twelve drawings), W. B. Mundie took first place; that for "Litch Gate for a Country Church" (thirteen drawings) and "Rendering from Photograph" (thirteen drawings) Oscar R. Enders took first place; in that for "Menu Card for Annual Banquet" (three drawings) Arthur Heun took first place; and "Essay on Expression in Form" (six papers) Peter C. Stewart took first place. Although Messrs. Mundie and Enders tied, the secretary was inclined to give Mr. Enders the majority of points because of the fact that in the Litch Gate competition he took first, second and third prizes. The club prize for the highest average in the competitions of the year is any one of the Richardson monographs of American architecture.

In membership the year commenced with fifty seven names on the roll, of which four senior members resigned and one, Mr. William Henderson, died. There has been admitted during the year seven senior, twelve junior and one honorary member, making a present total membership of seventy-seven.

The secretary spoke with much feeling, which was shared by every member present, of the affliction of one of the club's most active members and second vice-president, Mr. O. C. Christian, who became insane through overwork some months ago. One of the charter members, he was always first to lend his assistance in any club work, always kind and warm hearted and ready to encourage and help members in their work. The walls of the club rooms bear many evidences of his skill as a draftsman, and his artistic feeling for nature.

Following the secretary's report, the treasurer reported a balance in the treasury of $410.47. Messrs. Russegue and Stewart were appointed an auditing committee, and reported the treasurer's accounts correct as given.

The election of officers for the ensuing year being next in order, Messrs. Seman and Hefner were appointed tellers, the election being as follows :

President, W. G. Williamson ; first vice-president, T. O. Fraenkel ; second vice-president, W. B. Mundie ; secretary, W. R. Gibb ; treasurer, E. J. Wagner ; executive committee, the officers and Messrs. Arthur Heun and F. L. Linden.

After the appointment of committees to prepare for the annual exhibit and banquet of the club on November 17, the meeting adjourned.

The names of the competitors in the essay competition "Expression in Form," the papers of which were published in the October edition, page 28, are as follows : First place, "Jason," by Peter C. Stewart ; second place, "Henry," by C. B. Schafer; third place, "Pessimist, Jr.," by J. C. Youngberg ; fourth place, "Brethren, Let Us Hope," by A. Beatty Orth (of Pittsburgh) ; fifth place, "X. Y. Z.," by J. A. Miller ; sixth place, "Z., Jr.," by H. J. Ross. The signature of the author of the admirable criticism upon the papers, Mr. J. W. Root, was unintentionally omitted.

## Association Notes.

NEW YORK ARCHITECTURAL LEAGUE.

The conditions of the fourth annual competition for the gold and silver medals of the Architectural League, in connection with the sixth annual exhibition of the Architectural League of New York, are as follows :

*First.* The competitors must be residents of the United States, and under the age of twenty-five ; and

*Second.* The drawings shall be made in conformity with the following programme, and, in all parts and portions, entirely by the hand of the competitor.

The drawings will be judged by the jury appointed for that purpose.

The successful drawings, and such others as may be thought worthy, will be hung at the exhibition, the first and second prize drawings being so indicated, and these latter shall thereupon become the property of the League.

PROGRAMME.

A heroic statue of Zeus, standing nine feet high, has been secured by an American citizen from one of the excavations now going on among the ruins of Greece, and presented to one of our large cities.

The municipal government, fully appreciating the value of the gift, propose erecting a loggia for its reception and protection.

This pavilion is to be located upon a plot of ground formed by the conjunction of two avenues with a boulevard, the form and size of which is shown on the accompanying plot.

The structure should be of marble and *must* be classic in treatment.

Each contributor is required to exhibit two sheets of drawings : one to contain the front elevation, drawn to a scale of ¼ of an inch to the foot and rendered at will ; and the other to contain the ground plan, section and such other drawings as may be necessary to explain the design and construction, and drawn to the most convenient scale for the purpose, and rendered at will.

A small perspective sketch — rendered fully at will and taken from a point marked "A" on the plot — six feet high, can be shown upon either of the two sheets.

Each sheet to be cut to the uniform size of 24 by 32 inches, and to be white card or Bristol board, or Whatman paper mounted on stretcher. No colored borders, frames or glazing will be allowed.

Each sheet must be distinguished by a motto or cipher. A sealed envelope, bearing the same motto or cipher, must contain the name, full address, place and date of birth of the author, and must be mailed to the Medal Committee, No. 47 West Forty-second street, New York, on or before December 10, 1890.

Drawings are to be delivered flat, carriage paid, at the same time and place They will be returned at the close of the exhibition at the expense of the contributor.

Bruce Price,
Charles I. Berg, } Medal Committee.
Thomas Hastings,

A copy of the plot plan can be obtained upon application to the Medal Committee. Though the time given is brief a good representation of drawings should be made.

CHICAGO BUILDERS' AND TRADERS' EXCHANGE.

A special meeting was called by the president of the Chicago Builders' and Traders' Exchange for the purpose of receiving the final report of the committee on the organization of a trade school in connection with the Exchange, of which J. G. McCarthy was chairman.

In the absence of President Ketcham, Mr. C. B. Kimbell was made chairman. Mr. Alsip reported for the committee that while $3,930 had been subscribed for the project, it would take at least $10,000 to maintain such a school for one year, and as the balance was not forthcoming, and that as the Chicago Polytechnic Institute had started a trade department, he suggested that the matter be turned over to that institution. Mr. Harkins, the president of the Chicago Polytechnic Institute, gave an outline of what was proposed in the direction of establishing a trade school. It was to follow the general system of that of Colonel Auchmuty of New York, with perhaps some improvements, and at first would have classes in carpentry, plumbing, bricklaying and plastering. He proposed that the department be started under the auspices of the Exchange, and that a standing committee of the Exchange should direct it, each association in the Exchange contributing to its support.

Before adjournment, it was ordered that the Board of Directors of the Exchange procure the best legal opinion regarding the constitutionality of the Illinois lien law and its abolition or amendment.

THE MILWAUKEE ART LEAGUE.

The "Art League," the only sketch club of its kind in Milwaukee, although not generally known, has been flourishing for a year past. It started out with a membership of thirteen good workers for the cause, and has, as most clubs of this kind had, its difficulties to contend with, but has now become a permanent institution with newly fitted rooms at No. 29 Iron Block, where the regular meetings are held, working from models twice each week. A peculiar feature of this club is that of the thirty-nine members, about one-half are architectural draftsmen, who, besides enjoying the privileges of the life class, have their own special meetings at which to perform the work of the architectural part of the club. This makes the Art League practically two organizations in one, thereby giving the League greater strength than it could have were it dependent on draftsmen alone.

The officers are: President, John J. Baumgartner; first vice-president, O. E. Benner; second vice-president, A. C. Eschweiler; secretary, Paul Hammersmith; treasurer, Elmer Grey; and an Executive Committee, consisting of all the officers and two members, C. H. Keeney and H. Lammers.

## Our Illustrations.

Beloit College Chapel, Beloit, Wisconsin; Patton & Fisher, architects, Chicago.

United Presbyterian Church, Kearney, Nebraska; W. Z. Foster and W. Pell Pulis, architects.

Two views in reception hall, residence at Kennebunk, Maine, of Charles Parsons, Jr., of New York; interior by William Morgan Peters, Chicago; finished in oak; mantel of rockfaced brownstone.

Four pages are devoted to the Chicago Architectural Sketch Club competition in pen and ink rendering from a photograph. First place, Oscar Enders; second place was awarded to two, W. R. Gibb and E. C. Jensen. The photograph chosen as the subject is also reproduced.

PHOTOGRAVURE PLATES.

(*Issued only to subscribers for the Photogravure edition.*)

Residences, Philadelphia; Frank Miles Day, architect.

Eutaw Savings Bank Building, Baltimore, Maryland; C. L. Carson, architect.

City Hall, Philadelphia; John McArthur, architect. Girard Building, Philadelphia; Addison Hutton, architect.

Residence of J. L. Silsbee, Edgewater, Chicago; J. L. Silsbee, architect. Four full-page plates are given as follows: exterior, hall, sitting room, dining room.

## Correspondence.

*Editors Inland Architect:* WASHINGTON, D. C., Nov. 7, 1890.

If the convention of the American Institute of Architects recently held in Washington is "the second annual convention, as the new organization dates from last year," as you state so positively in your Intermediate News Number, October, 1890, then a new charter must have been obtained in 1889 from the State of Ohio—of which fact I have not been informed.

If you will turn to page 36 Journal of Proceedings Consolidation Convention, you will find the opinion of Hon. Jacob D. Cox, of Cincinnati, on this subject, which is as follows: "If an entirely new corporation is formed here and now, it can only be done under the laws of Ohio, and the new corporation would be an Ohio corporation. In this case both the old corporations should be dissolved and their old charters would become defunct."

With this opinion before you, can you repeat that the American Institute of Architects held its second annual convention this year?

You attended the Consolidation Convention, and know very well that the old American Institute of Architects is not defunct, but that it had new and vigorous blood infused into it at the convention held in Cincinnati November 20-21, 1889. I remain sincerely yours,

ROBERT STEAD.

There is nothing in the above that alters our opinion, which is borne out by the facts except that a typographical error made us say that the last convention was the second *morally and legally* instead of morally *if not* legally. Legally it was the twenty-fourth, as the action of the convention made it so in preserving the old charter; but we still hold that the vote upon consolidation taken prior to the convention was the real expression of the members of both bodies and it should have stood as such, and the action of the convention the simple ratification thereof. It is a small matter however, and as a rose by any other name would probably be imbued with the same initial fragrance, the main thing now is to make the aroma of the association work pleasant to professional nostrils and not allow it, by neglect and ill-advised legislation, to smell to heaven. It will be as it is made, whatever the name may be or whether it respects tradition or not. The future benefit to the profession will not be gauged by the traditions of the Institute, but by the active and continuous work performed from year to year.—EDITORS INLAND ARCHITECT.

## Building Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, Ill., November 10, 1890.

The architects, builders, contractors and consulting engineers who have recently spoken upon the business situation and probabilities seem to agree pretty well, and their conclusions are gratifying to building, manufacturing and commercial interests. All conditions are favorable to a continuance of activity. It is generally understood that the leading railway systems will advance freights before long. It is known that a basis has at last been laid for greater though not perfect harmony. Manufacturing interests are exceptionally prosperous, even though margins are close. Agricultural interests are thriving, and although they are heavily indebted to money-lenders, it is gratifying to know that the large crops are profitably marketed. The lumbermen have had a good season and are preparing for another. Mill and shop people have had no time to waste, and all have made money. Builders recognize that the year 1890 has been an exceptional one East, West and South. The engineering profession has opened up more new work and new projects than ever before in a single year. The greater or less stringency in the money markets acts as a check against rash undertakings and speculation. Monopolistic tendencies have been checked through wise judicial decisions, and promoters of grasping schemes have had notice served upon them that their doings will be closely watched. Organization of all kinds is making steady progress and all agencies for production and exchange are more wisely managed than during their growth to their present proportions. The iron and steel makers are expanding capacity rapidly. Mining interests are thriving in all sections, and makers of machinery are overcrowded with work. This progress is due to natural rather than artificial causes, and has its basis in the wants and necessities of the people. Economics are being developed in all directions, and on the other hand habits of thrift are more general among the people. Preparations are being made among the capitalists, investors and managers of great interests and enterprises to enter upon even greater activity next year in many departments of activity, from the establishment of ocean and coastwise ship lines to the construction of additional railroad mileage when it is found to be needed, and to the building up of industries and the prosecution of work of all kinds wherein profit is to be made. Panics and depressions are still possible, but every month's progress renders them more improbable and remote. The development of markets all over the country for products of the soil is the secret source of the phenomenal progress and activity everywhere visible.

## Synopsis of Building News.

**Baltimore, Md.**—The Phœnix Club are contemplating a new building, four stories, brick and stone. The congregation of the Grace Baptist Church will erect a new church in the spring. A company of Baltimore and New York capitalists, with a capital stock of $7,000,000, will erect a tin plate manufactory, which will cover several acres of land. The buildings will be erected as soon as the arrangements can be made. About $5,000,000 will be put in the plant.

**Buffalo, N. Y.**—Architect W. H. Archer, of 9 German Insurance Building, reports for trustees of the Y. M. C. A., Tonawanda, New York: Association building, 112 by 134 feet; with auditorium, baths, gymnasium, society rooms, and four stores, three stories and basement, tin roof, iron columns, stairs and fire escapes, steel girders, plate glass, copper bays, electric light, etc.; cost $40,000. For George P. Smith, Esq., Tonawanda, New York, brick and stone business block, apartments, hall and offices, three stories, 78 by 86 feet, tin roof, iron columns, fire escapes, steel girders, copper bay windows, plate glass, elevators, etc.; cost $26,000.

**Chicago, Ill.**—Architect F. Koenig: For M. Portz, eight two-story flat buildings on Rebecca street near Douglas Park; to be of St. Louis pressed brick with Bedford stone trimmings and galvanized iron bay windows, and all the sanitary improvements; cost $60,000. For A. Geissler, nine two-story flat buildings on 15th street near Douglas Park, of St. Louis pressed brick and stone; the cost will be about $60,000.

Architect F. L. Fry: For W. H. Thomas & Son, a three-story store and flat building, size 30 by 100 feet, to be erected at 945 W. Lake street; the front will be of galvanized iron and plate glass and they will put in the modern improvements; cost about $18,000. Working on plans.

Architects Hetherington & Warner: For J. J. Coughlan, just finished plans for a two-story and basement residence of pressed brick and stone, with furnace and all the improvements; to be built on Walnut street near Sacramento avenue. For D. J. Murphy, at Ravenswood, four two-story and basement frame dwellings, with brick basements, bath rooms, closets, mantels, furnaces, etc.; the cost will be $15,000.

Architect Julius H. Huber: For B. and P. Mahon, a four-story store and flat building, size 52 by 48 feet, to be built on the corner of 22d and Dearborn streets; it will have a front of rockfaced blue Bedford stone and cost $15,000. For S. H. Harris, a two-story basement and attic residence of pressed brick and stone, with furnace, hardwood interior, to cost $7,000, on Monroe street near Kedzie avenue. For B. Weber, two two-story and basement frame residences at High Ridge, to have stone basements, furnaces, stained and plate glass, and the sanitary improvements; cost $10,000.

Architect George Grussing: For John Collins, on Troy street near Huron, a two-story flat building of Tiffany pressed brick and brownstone. For Thomas Foster, on Forty-first street, a two-story flat building of Tiffany pressed brick and stone. For Eugene R. Maunder, at 1506 Lake street, a three-story flat building, to be of Tiffany pressed brick and Bedford stone.

Architects Ostling Brothers: For C. N. Smith, working on plans for a six-story apartment building, size 70 by 105 feet, to cost $100,000, to be erected on the corner of Thirty-sixth street and Indiana avenue. It will have a Bedford stone front, hardwood interior finish, hot water heating, marble wainscoting, elevator, electric light, stained, plate and beveled glass and all the improvements. The same architects have completed plans for an eight-story office building, to be erected on Quincy street near La Salle. It will be 60 by 55 feet in size, with Tiffany pressed brick and Portage brownstone front. They will put in steam heat, elevator, electric light, and all the conveniences. The cost will be about $100,000.

Architect C. M. Palmer: For William H. Moore, a three-story and basement residence at 4119 Grand boulevard, to have a Bedford stone front, hot water heating, and cost $14,000. For C. C. Landt, a three-story and basement residence on Drexel boulevard south of Forty-third street. It will have a rockfaced Bedford stone front, hardwood interior finish, hot water heating, etc., and cost $15,000. For James Von Vezey, three three-story Bedford stone front residences on Forty-sixth street near Vincennes avenue, to have furnaces and all the sanitary improvements, and cost $15,000.

Architect Louis Martens: For Thomas J. Leonard, at 648 to 652 Polk street, a three-story flat building, to cost $12,000. For Martin Schaefer, a four-story store and flat building, of Findlay pressed brick and buff Bedford stone with galvanized iron bays and tower, to cost $15,000, on the north-east corner of Twelfth street and California avenue. For A. L. Jones, on Langley avenue near Forty-eighth street, three two-story dwellings, to have buff Bedford stone fronts, furnaces and all the improvements, and cost $15,000.

Architect Frederick W. Perkins: For Mrs. Moses Gunn, making plans for a seven-story apartment building, to be erected on the south-east corner of Twenty-first street and Calumet avenue. It will have a front of pressed brick and terra-cotta, tile and marble work, elevator, steam heat and all the improvements; the

cost will be about $70,000. He is also working on plans for a four-story apartment house, to be built on the corner of Thirty-first street and Calumet avenue, to have a front of Findlay pressed brick and Bedford stone, steam heat, electric light, marble work and all the improvements, and cost about $55,000.

Architect W. L. B. Jenney: For Messrs. Speed and Henning, at 299 to 303 Clark street, an eight-story addition, to be of pressed brick and terra-cotta, of steel construction and fireproof. It will be made into a first-class modern twelve-story building, well adapted for offices or hotel purposes.

Architects Patton & Fisher: For W. A. Dunshee, a six-story basement and attic apartment building, size 51 by 110 feet; to cost $70,000; to be erected at 283 Oakwood boulevard; it will be of granite, first story and above of rockfaced and smooth Roman brick with terra cotta trimmings; they will put in steam heat, electric light, and all the improvements.

Architect Henry Sierks: For Edward Uihlein, a four-story and basement store and flat building on the corner of Forty-seventh street and Center avenue; to be of Indiana pressed brick and Bedford stone; cost $16,000.

Architects Flanders & Zimmerman: For C. L. Lawton, a two-story basement and attic, pressed brick, stone and frame residence to be erected on Greenwood avenue between Forty-fourth and Forty-fifth streets; it will have steam heat, electric light, and all the sanitary improvements; cost $15,000. For J. R. Towle, six four-story store and flat buildings, to have a frontage of 150 feet and cost $75,000; they will be erected on Sixty-third street near Madison avenue and have pressed brick and stone fronts with copper bays, hardwood finish throughout, porcelain bath tubs, marble entrance tile floors, dumb waiters, speaking tubes, etc. For B. Callaghan, three three-story stores and flats, size 60 by 85 feet, to cost $25,000; to be erected on Thirty-fifth street near Rhodes avenue; to be of pressed brick and stone with copper bays, marble tile and electric work.

Architect D. S. Pentecost: For A. L. Lundgren, a two-story basement and attic frame residence to be built at Prospect Park; to be of stone basement, have hardwood finish, hot water heating; will put in gas machine and gas engine, bath rooms, closets, mantels, billiard room, etc.; cost $15,000. For J. F. Pratt, on Jackson street, a two-story flat building, and on Whipple street two two-story flat buildings, to be of pressed brick and stone and have all the sanitary arrangements; the cost will be about $12,000.

Architect Wesley A. Worrell: For the Columbian Pyrotechnic Company, on Cottage Grove avenue between Sixtieth and Sixty-first streets, a platform to seat 15,000 persons, a stage 150 by 300 feet, an artificial lake 100 by 300, dressing-rooms, work rooms, magazines for powder and fireworks, a pavilion 100 by 100 feet, a promenade 50 by 300, music stand, etc.; the cost of these buildings will be about $50,000. The president of the company, H. Burkholder, can be found in the Gaff building.

Architect Oliver W. Marble: For George W. Park, two three-story and basement residences on Thirty-ninth street and Grand boulevard; they will have fronts of Portage red sandstone and be finished in mahogany, bird's eye maple, cherry, etc.; have hot water heating, electric light, dumb waiters, plate and beveled glass and all the best of sanitary improvements, and cost $50,000.

Architect Clinton J. Warren: For Frank Aldrich, a seven-story hotel on the corner of Lake avenue and Forty-seventh street; to be of pressed brick, stone and terra-cotta on four sides; have four elevators, steam heat, electric light, marble floors and wainscoting, etc.; cost about $300,000.

Architect George W. Maher: For A. F. Shuman, on Cornell avenue, a four-story apartment building (may be changed into hotel during World's Fair). The front will be of Michigan green buff sandstone; will put in steam heat, elevator, dumb waiters and all improvements; cost $30,000.

Architect J. E. O. Pridmore: For J. W. McFarlane and others, a ten-story apartment building, to be erected on the South side. It will be of steel construction, and thoroughly fireproof; have hot water heating, six elevators, electric light and all the best of improvements and cost $300,000. The same architect will also make plans for a fifteen-story hotel, to be erected near Washington Park and the main entrance to the World's Fair. It will be absolutely fireproof, and finished in magnificent style, and cost upward of $800,000.

Architect Otto H. Matz: For Mr. James Lynch, three-story and basement apartment house 25 by 80 feet, on Oak street near Lake Shore drive; St. Louis brick and Portage stone; cost $12,000. Also preparing plans for Mrs. Hanka Ohm, Belden avenue, two-story, basement and attic residence; blue Bedford stone, with French roof; cost $10,000. For Mrs. Amberg, four-story and basement store and flat building, 65 by 100 feet, on Dayton street; iron and plate-glass and Bedford stone fronts; cost $30,000.

**Cheyenne, Wyo.**—Architect J. S. Matthews: For Mr. Christopher O'Brien, a two-story frame hotel; size 32 by 60 feet; cost $5,000. For Mr. Robert Robinson, a store residence; size 75 by 86 feet; slate roof, conservatory; cost $40,000. For the city corporation, a two-story hose-house; size 22 by 66 feet; pressed brick, and red stone trimmings; cost $6,500. For the Laramie county district, a two-story and basement high school with tower; size 80 by 82 feet; cost $38,000; pressed brick, with red mortar and stone trimmings.

**Cincinnati, Ohio.**—Reported by Lawrence Mendenhall: A story is current about a farmer who bragged concerning his abilities. He was "rawther peert on guessin'," as he said, one day, picking up an egg freshly laid by a Plymouth Rock, said he, "I'll wager as that ere egg will hatch out a cock." The egg was marked and set, and in due season the "cock" turned out to be a pullet. When confronted with his mistake, he said, "by gosh, I'm wrong! I'll never read the almanack agin." With the farmer's mistake in view, I feel like being a "leetle keerful" in prophesying as to the outlook of trade. I don't know whether politicians will claim that the McKinley bill will affect building or not, but as for me, I can't see how. No doubt, should our next season's work fall below our expectations, but that some such foolish howl will be made. I have found that it is very easy to blame others for our own shortcomings. Of course, it is too early to foretell what the spring will bring forth, but our architects and builders are inclined to look upon the bright side, and think that we will have a good trade.

Notwithstanding the strikes, Cincinnati will make a better showing this year than she did last, as the following report will show. For the nine months there have been 1,710 permits issued. Reported value as follows: Repairs, $384,795.00; frame, $749,491.00; brick, $2,476,238.00; moving buildings, $396.00, with a total of $3,610,923.00. Add to not include the $2,000,000.00 represented by the suburban trade, outside the corporation, which, by the by, is exceedingly active.

Architects S. Hannaford & Sons have prepared plans for a large tobacco factory at Middletown, Ohio, for Mr. P. J. Sorg, size 68 by 275 feet, and five stories high; materials, brick, architectural iron; steam heat, fire escape, plumbing, tin roof, etc. Also, a residence for Capt. George N. Stone, city; materials, stone, slate roof, furnace, plate and stained glass; hardwood finish, wood mantels, gas, plumbing, etc.; cost $20,000.

Architect Levi P. Hazen has the plans ready for a brass foundry for Lunkenheimer Brass Co.; materials, brick, architectural and galvanized iron, tin roof; gas, plumbing, etc.; size 250 by 136 feet; cost $60,000.

Architect John H. Bolt has prepared the plans for a residence for John Rahe; materials, brick, stone trimmings, plumbing, stained glass, slate roof, wood mantels, etc.; cost $6,000.

Architect G. W. Drach has prepared plans for Mr. Fred Davenport; materials for residence, frame, slate roof, pine finish, plumbing, stained glass, etc.; cost $5,000.

Architects Crapsey & Brown report for Messrs. Graf, Mersbach & Co., a saddlery factory; materials, brick, architectural iron, steam heat, elevators, tin roof, fire escape, plumbing, etc.; cost $20,000.

Architect Edwin Anderson reports for the Mosler Safe & Lock Co., at Hamilton, Ohio (present offices at Cincinnati), an extensive safe plant; materials, brick, slate roof, ironwork, elevators, gas fixtures, plumbing, etc.; cost about $85,000.

Architect Charles Diss reports for Mr. George Eickert, a residence; materials, brick, slate roof, pine finish, wood mantels, plumbing, furnace, blinds, etc.; cost $8,000.

Architects G. & A. Brink report for Mr. Moses Goldsmith, 45 Elder street, three residences; materials, brick, slate roof, iron, pine finish, wood mantels, plumbing, blinds, grates, etc.; cost $10,000.

Architect Louis Picket reports for Dr. Louis Metz, Madisonville, Ohio, a residence; brick, slate roof, furnace, stained glass, hardwood finish and mantels, gas and plumbing; cost $7,000.

Architect S. S. Godley reports for F. Rockhold, Esq., Hillsboro, Ohio, a residence; materials, frame, galvanized iron, slate roof, plate and stained glass, hardwood finish, gas, plumbing, etc.; cost $6,000. For Mr. John Mauss, Pearl near Race, Cincinnati, a residence; materials, frame, slate roof, furnace, stained glass, hardwood finish, gas, plumbing, wood mantels, etc.; cost $5,000. For E. G. Howard, Price Hill, Cincinnati, a residence; materials, frame, slate roof, plumbing, stained glass, mantels, grates, pine finish, gas, etc.; cost $5,000.

**Denver, Colo.**—The New York Cracker Company contemplate building a large new factory to cost about $100,000. The building will be 100 by 150 feet and four stories high and will be one of the largest of the kind in the United States.

W. B. Worcester will erect a large office building; cost about $16,000.

J. F. Roberts has plans prepared for a two and one-half story brick residence, size 22 by 44 feet; cost, $9,000.

Architect F. J. Miller has prepared plans for Mr. W. H. Crawford, for a five-story flat building, brick with stone fronts, size 26 by 91 feet; cost, $25,000.

**Detroit, Mich.**—Architects A. C. Varney & Co.: For John H. Johnston and Robert Leadley, a three-story double brick residence, size 87 by 40 feet, Findlay pressed brick, stone trimmings and slate roof; cost $7,000. For William J. Wray, a two-story brick residence, pressed brick, slate roof; cost $5,000. For Edward Chope, a two-story double brick residence; cost $7,000. For Herbert Snow, a three-story double brick livery stable, to have elevator, size 43 by 80 feet; cost $9,000.

Architects John Scott & Co.: For Charles L. Freer, a two-story residence, stone with slate roof; cost $45,000.

Architects Van Leyen & Hackett: For D. W. Simons, a three-story double brick residence, slate and composition roof, furnace heated, size 42 by 65 feet; cost $10,000. For the Forrest Lawn Cemetery Company, a gate lodge, 28 by 45 feet; cost $5,000; also a Fieldstone receiving vault, size 27 by 31 feet; cost $6,000.

Architect P. Sederick: For the City Brewing Company, a four-story brick building, size 148 by 105 feet; cost $48,000.

Architect H. J. Rill: For W. H. Holcombe, a three-story double brick residence, stone trimmings, slate roof; cost $9,000.

Architect W. P. Clark has prepared plans for a four-story summer frame hotel at Port Dover, Ontario; cost $50,000.

Architects E. A. Walshe & Son: For James H. Pound, four three-story store and flat buildings; cost $16,000. For Robert J. Wilson, a two-story brick residence; cost $8,500.

Architect Gordon W. Lloyd: For J. E. Bolles & Co., a four-story manufacturing building, stone trimmings, elevators, size 80 by 64 feet; cost $30,000.

Architect Albert E. French has plans for two-story brick school building at Lenaton, Ontario; cost $8,000. Also a two-story frame hotel at Petite Cote, Ontario; cost $8,000. For R. S. Webb, a two-story brick refrigerator; cost $5,000.

Architects Gearing & Stratton: For Mr. S. P. Peabody, at Columbus, Ohio, a two and one-half story brick house, stone trimmings, slate roof; cost $12,000.

**Kansas City, Mo.**—Plans for the following buildings are being prepared: Business block on Tenth and Walnut streets, 48 by 113 feet, six stories, to cost $30,000; L. G. Middaugh, 516 and 517 Massachusetts building, architect, and Capt. J. T. Blake, owner; building to be built of brick and stone, with all modern conveniences.

Business block 615 Delaware street; brick and stone, three stories; $4,000. Joseph C. Ford, owner. James & James, architects, 505 Mercantile building.

Brick business, block on Union avenue and Mulberry street, 31 by 40 feet; two stories; cost $4,000, J. J. Squires, owner. J. T. Baxter, 500 Mercantile building, architect.

Brick business block Twelfth and Cherry streets, 47 by 76 feet, four stories; cost $15,000. Bellemer Brothers, owner. J. T. Baxter, architect.

Brick warehouse, 50 by 100 feet, three stories; cost $12,000; Tenth and Hickory streets. S. E. Stranathan, owner. H. B. Prudden, 616 and 617 Massachusetts building, architects.

Frame sale stable, 125 by 250 feet, two stories; cost $8,000; on Bell between Eighteenth and Nineteenth streets. Kansas City Stock Yards, owner; E. S. W. Draught, architect and builder.

Brick barn, 38 by 84 feet; cost $3,000; near northwest corner Sixth street and Wabash avenue. Robert Keith Furniture Company, owner. J. T. Baxter, architect.

The Husted Investment Company, of Kansas City, Kansas, will build ten residences, five brick and five frame, in Chelsea Park Addition, ranging in cost from $3,000 to $5,000. William Wood, 502 Husted building, is preparing plans.

**Kearney, Neb.**—Architects Foster & Pulis: For Messrs. Downing & Bartlett, a store and office building, stone and pressed brick; cost $25,000.

Architect I. Hodgson, Jr.: For J. L. Keck, a large brick and stone hotel; cost $100,000.

**Minneapolis, Minn.**—W. L. Wolford has added a $7,000 addition, with alterations, to his residence.

O. Royal will erect a two-story frame residence at a cost of $6,000.

Architect S. Sedgwick: For the Westminster Presbyterian Church, a one-story brick church, size 64 by 100 feet; cost $10,000.

The Minneapolis Club propose building a new brick club house; to cost about $75,000.

Messrs. Willis & Dunham have plans drawn up for a five-story brick and stone store building; cost $60,000.

**Ogden, Utah.**—Architect J. S. Matthews, Cheyenne, Wyoming: For the First Presbyterian Church Society, a brick church with red stone trimmings; size 75 by 97 feet; cost $37,500.

**Pittsburgh, Pa.**—Architect F. C. Sauer has prepared plans for two brick residences for Mr. Edward Skees; cost $7,800. Also a stone residence for G. W. Morris.

The contract for the Lyceum theater has been given to Messrs. R. C. Ballinger & Co., of Philadelphia, for $240,000.

Mr. J. S. Brown is having plans prepared for a thirteen-story apartment house, to be erected at Allegheny. The building is to cost $150,000.

The Union Club Company will erect a five-story brick hotel at Charleroi; to have all modern conveniences; cost $70,000.

Architect Edward Stotz: For Mrs. C. L. Dawes, a two-story frame residence; cost $7,000.

There are very few new plans on the boards here now.

**Rochester, N. Y.**—Architects Thomas Nolan and E. B. Nolan have prepared plans for a five-story brick and iron building for the Rochester Electric Light Company; 100 feet front by 165 feet deep; heavy freight elevator; hot blast or steam heating; molded brick, terra-cotta and stone trimmings; to cost $36,000. For a frame house for Professor Latimore; to cost $6,000.

Architect Otto Block has prepared plans for a brick block of two stores and four flats; 40 feet front by 70 feet deep; three stories high; owner George Klem; cost $12,000. For G. W. and F. W. Crouch, a brick block, to contain one store and nine flats; two stories high; 135 feet front; to be fitted up for first-class flats in every way; to cost $16,000.

Architect W. Foster Kelly: A frame dwelling house for Dr. Spencer on Union street; to cost $7,000. Double frame house for A. E. Dewey; to cost $4,000. Dwelling house for Walter North; to cost $3,000. Frame house for Levi Sherman; to cost $4,000.

**Seattle, Wash.**—The Trinity Church congregation will erect a church and parsonage; the buildings are to be of brick and stone; work to commence at once; estimated cost $60,000.

**St. Louis, Mo.**—The Mission Church society will erect a brick church; to cost about $7,000.

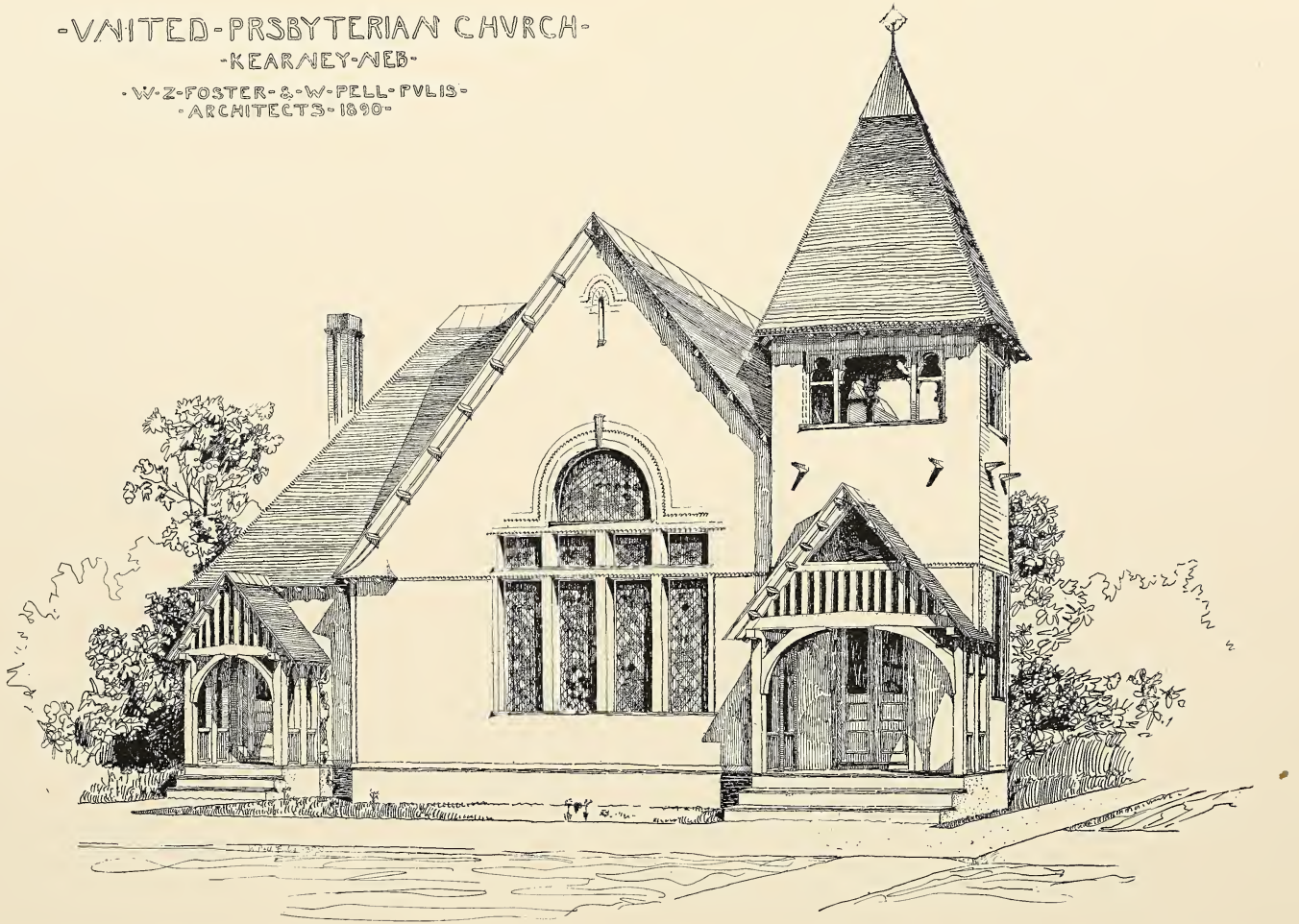
C. F. Hoyle has plans for a four-story store and office building; to cost $22,000.

Architect H. E. Roach: For the Butler Tobacco Company, a seven-story brick building; steam heated; cost $50,000.

Architect John A. Quinn: For J. Cantwell, a brick and stone residence; to cost $15,000. For C. F. Warner, a brick residence; cost $8,000.

The Pastime Gymnasium will erect a three-story brick club house; to cost about $5,500. Goesse & Remmer, contractors.

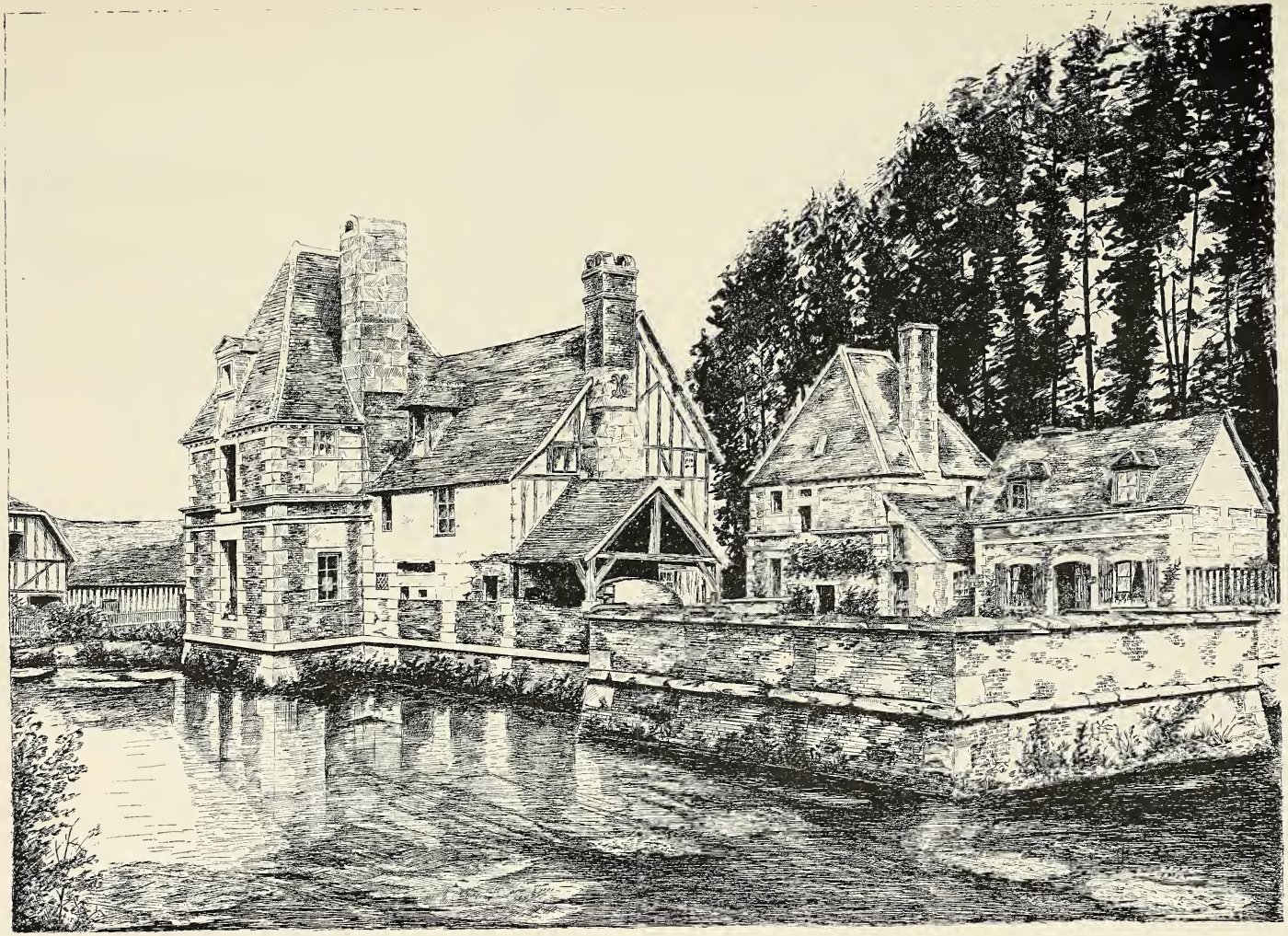
Pechman Brothers will erect a three-story dwelling house; brick with slate roof. Kievre & Son, contractors.


-VNITED-PRSBYTERIAN CHVRCH-
-KEARNEY-NEB-
-W-Z-FOSTER-&-W-PELL-PVLIS-
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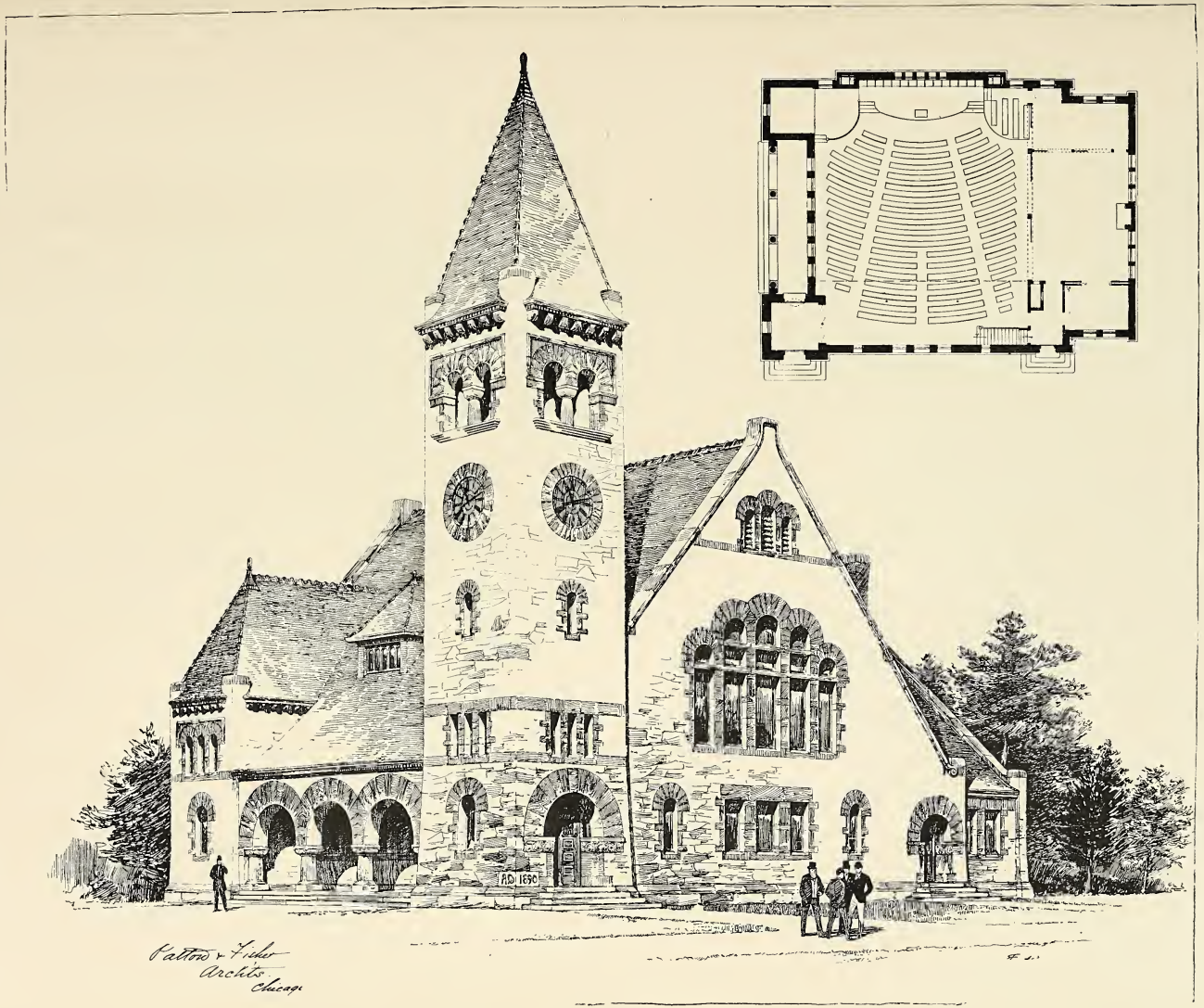
CHICAGO ARCHITECTURAL SKETCH CLUB COMPETITION IN PEN AND INK RENDERING FROM A PHOTOGRAPH.

AWARDED TIE FOR SECOND PLACE—E. C. JENSEN.



CHICAGO ARCHITECTURAL SKETCH CLUB COMPETITION IN PEN AND INK RENDERING FROM A PHOTOGRAPH.

Awarded Tie for Second Place—W. R. Gibb.

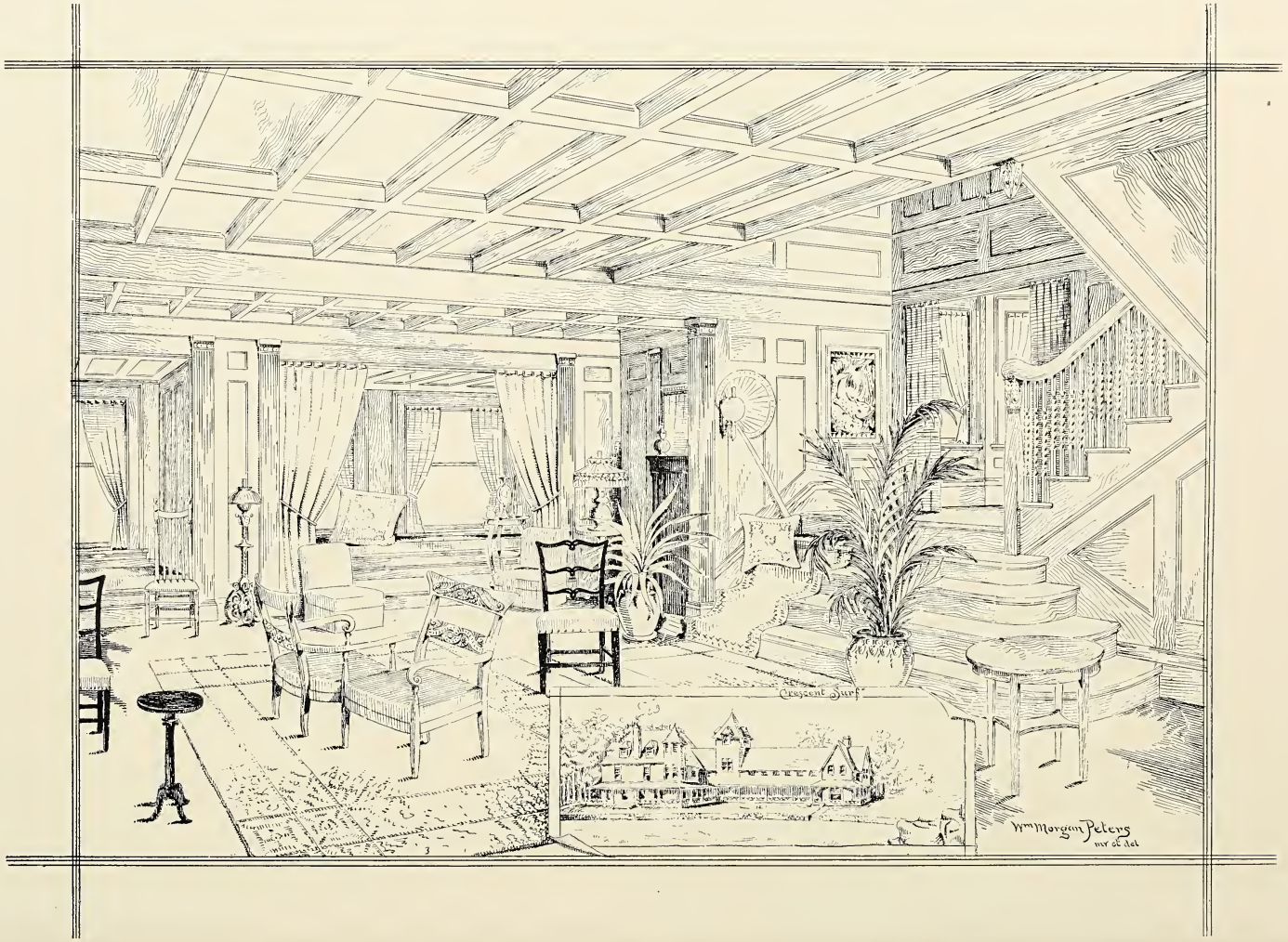


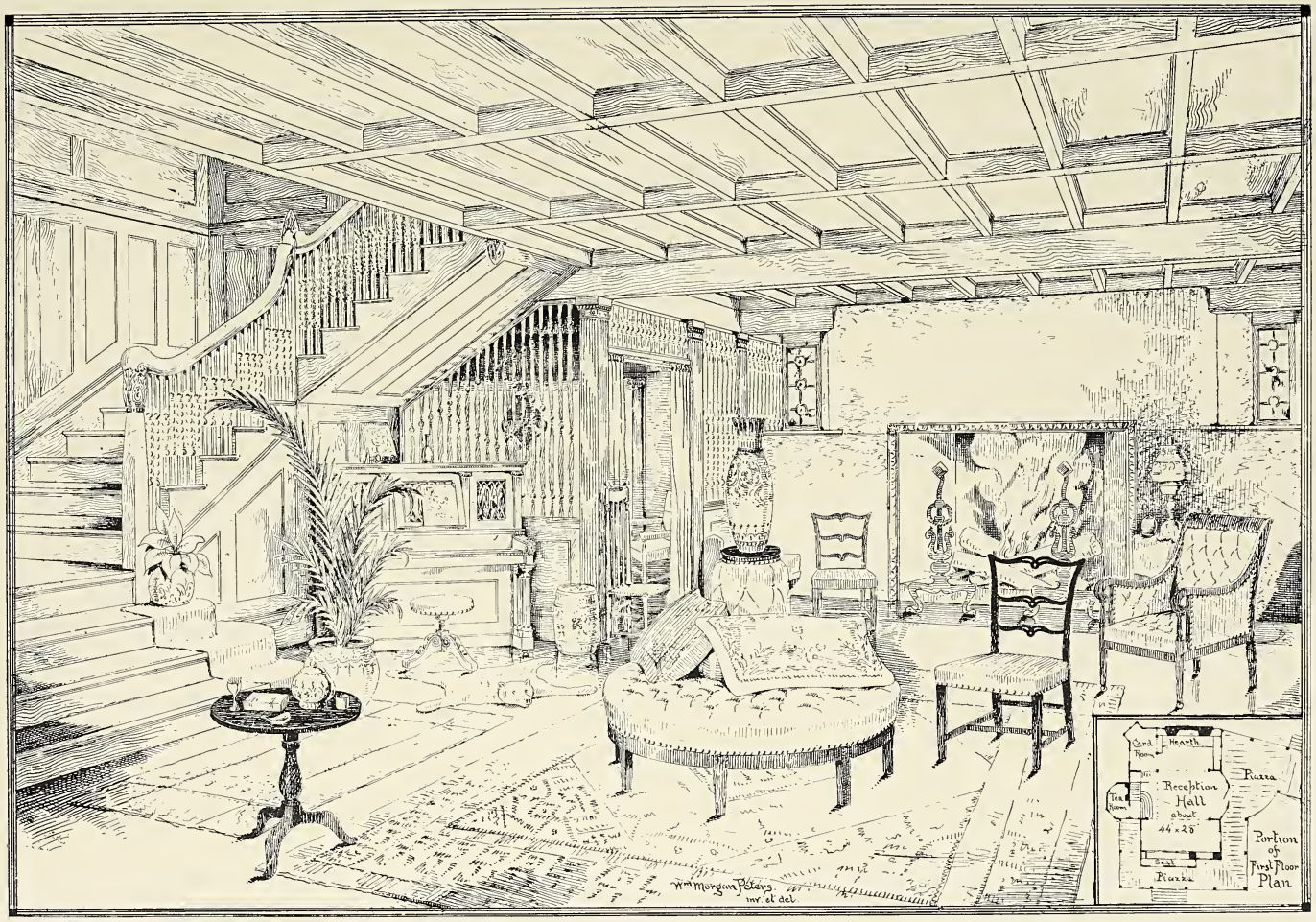

BELOIT COLLEGE CHAPEL, BELOIT, WIS.

PATTON & FISHER, ARCHITECTS, CHICAGO.



SUBJECT OF CHICAGO ARCHITECTURAL SKETCH CLUB COMPETITION IN PEN AND INK RENDERING FROM A PHOTOGRAPH.


Crescent Surf
Wm Morgan Peters
Arr at Jet




TWO VIEWS IN RECEPTION HALL, RESIDENCE AT KENNEBUNK, ME., OF CHAS. PARSONS, JR., OF NEW YORK.

Interior by Wm. Morgan Peters, Chicago.




CHICAGO ARCHITECTURAL SKETCH CLUB COMPETITION IN PEN AND INK RENDERING FROM A PHOTOGRAPH.

First Place—Oscar Enders.

THE INLAND ARCHITECT AND NEWS RECORD

Entered at the Postoffice at Chicago as second-class matter.

A MONTHLY JOURNAL (WITH AN INTERMEDIATE NEWS NUMBER AND A PHOTO-GRAVURE EDITION) DEVOTED TO WESTERN INTERESTS.

VOL. XVI. No. 6. CHICAGO, NOVEMBER, 1890. Regular Edition, $3.00 a Year. Photogravure Edition, $8.00 a Year.

# INTERMEDIATE NEWS NUMBER,

DEVOTED TO

## ASSOCIATION AND BUILDING NEWS.

PUBLISHED BY

THE INLAND PUBLISHING COMPANY,

CHICAGO, ILL.

## The Second Clark Medal Competition.

THE Clark medal competition, of which full particulars were given in the September edition, together with gravures of the medal and the statue for which the competition problem was to provide a pedestal, has been decided, the report of the committee being as follows:

COMMITTEE REPORT ON CLARK MEDAL COMPETITION.

*To the President and Members of the Chicago Architectural Sketch Club:*

GENTLEMEN,—In running over the designs submitted for the Clark medal this year, one is struck with the deserved appreciation of the statue of Lincoln at the entrance to Lincoln Park in Chicago. For example, "Columbia," which is an exceptionally attractive drawing, is nothing more than an adaptation of that monument. Others, like "Triangle and T-Squares" and "Tramp, Tramp, Tramp," have failed through lack of proportions and careless drawing. Again, there are some who have entirely disregarded the real problem, and, like "Stone-wall," let their fancy fly to the beautiful monument to Scott in Edinburgh.

A casual study of "Columbia" would, perhaps, pronounce it good enough and not come from a disregard of academic rules that are better followed. The jumble of houses is certainly a detriment to the perspective, and should have been made indistinct, attractive and in scale, or left out. If a figure is introduced in an elevation, it should be placed on the ground line and exactly six feet high and drawn only in outline.

The figure of a man put on a mechanical drawing is there solely for the purpose of indicating the scale in which the design is shown.

Much that has been said of the drawings of "Columbia" will apply more forcibly to many of the other drawings, so will not be repeated in running over the others.

If "Cilix" had the trouble to put a figure in his drawing to indicate the scale, he would have noticed himself that, attractive as the idea of running a colonnade around the statue may be, it would never do to put a full sized pedestal surrounded by what would look like the model of a future colonnade. The colonnade indicates his scheme of detail for his entire composition, so the pedestal should have been classical in treatment. The workmanship on the drawings is excellent. The general effect of the perspective would have been better had it been made more striking in its contrast of light, shade and shadow, and portions of the background made darker. The effect of a dark background can be appreciated by looking at the front elevation of "Columbia," which is an excellent model of a background for pen and ink studies.

"Spear Head," like several others, should have more respect for the "Orders," or else leave them alone. The top is too bald and out of proportion with the frieze. If he had not time to work out a rail in keeping with his pedestal, then it would be better to show none at all. Certainly, the commonplace iron fence, with corner posts without bases, is a detriment to his design. The background looks as though it was put in by a friend who did not pay much regard to the character of work and size of lines, etc., used in drawing the pedestal.

If "Tramp, Tramp, Tramp," had taken the trouble to carefully study some of the old classical pedestals that have the same general form as his, he never would have drawn the wedge-shaped shaft he did. It would be better to omit at least a part of the stone directly under the bronze base of the horse. The surrounding seats do not conform to the pedestal in their detail, and the steps had better be in front of the statue.

The plans and elevations are too carelessly drawn and lack the precision necessary in such drawings. It is an excellent idea to show a bit of the frieze, but the object of showing it is to give the exact detail of that portion of the whole design, and is better left off than carelessly drawn as this is.

Had "Athens" taken more care with the proportions of his pedestal and the detail of the ends of his seats, his design would have been placed higher in the judging. The pedestal looks as though it had been built according to the lower section but found too low, so another pedestal was placed upon the first. It would be better not to cut a white marble pedestal in two with a bronze frieze, but connect the marble at the corners and have the frieze form panels between.

The comparatively small ashlar that supports the massive monolith in the carelessly drawn drawings by "Francis I" might be able to carry its load, but it would never look well.

"Lives of Great Men, etc.," is an excellent method of sketching perspective studies, but the design is not satisfactory. Simply because certain ruins in Rome are most pleasing to look upon there, the good taste of reproducing them is questionable. At best they are simply accessories to the monument, and houlds not be large and important.

The stiff, wooden looking design by "Junior" has the advantage of being less commonplace than many others, but the detail is bad and the drawing too coarse. The curious contortion of a hotel on the right is certainly no addition to the design.

"Claymore" has evidently not grasped the technique of water-color sketching, and it would be much better to adhere to pen and ink for competition drawings until he can make a more attractive rendering in colors. The use to which all the steps and platform and pedestals above the pedestal for the statue are to be put is not explained.

In looking casually over the drawings, one might think that some chance had mixed a sketch for a busy street scene for some theater with the drawings; but on inspection it is found that "Pro Patria" has worked out an intricate plan respecting a pedestal surrounded by a lot of pagodas.

"Minuet" has a very good idea of drawing with pen and ink, but his design is uninteresting. The four sets of steps would look very monotonous, and the only portion of such a design that can be attractive is the detail, which has been neglected and no study put into it.

If any of the drawings were to be thrown out as unworthy of criticism, "Tbistle" and "Paul Metzinger" deserve to be so treated. The latter has some regard for the requirements of the competition, whereas the former disregards even that. The clumsy, brutal form of architecture that gets its forms from the crudest forms of the Normans, or even the more primitive Mound Builders, and its detail from the Byzantine, Classical, Gothic, or wherever it may, that is often classed as "American Romanesque," is bad enough in warehouses and armories, but should never be considered for a pedestal unless for some Indian chief, and to be the work of his tribe.

The drawing submitted by "X I V — S" is most excellent in its conception, but unfortunate in both its workmanship and proportions. The proportions are bad, and the vivid colors in the perspective would ruin the chances of any design. There is no excuse for getting a statue so badly contorted as that shown, when a glance at a few photographs would correct the error.

"T Square and Triangle" had better devote what time he has to the study of the problem he is at work on, instead of endeavoring to design a whole city. In this case had he used the time that was necessary to draw out his big buildings in the background, in studying some good examples of pedestals now built, he never would have submitted the badly proportioned attempt at a classical pedestal that disregards all the classical proportions.

Apparently "H" considers that the columns about the celebrated Doge's Palace look better since it has been necessary to raise the ground surrounding them, covering up their bases. The base is one of the beauties of a column, and there is no reason why it should be deprived of it in modern work. The drawings lack freedom in handling, and the elevations are overworked. The general scheme of putting a massive pedestal on top of detached columns is never attractive, as it has an unstable appearance.

The similar motive shown by "Luminus" is better where the columns are simply an ornament on the face of the structure that does the work. "Luminus" is inclined to be too ingenious, as shown by the confusion of steps and pedestals forming the base of the monument, and in the background.

The middle portion of the pedestal shown by "George Cadeing" is very good, but the whole design does not hold together in detail. The steps are much too steep, giving the whole pedestal a mean look. The drawing is overworked and shows timidity in handling the pen.

"Jupiter" has represented a design better adapted for a clock or mantel ornament, that is made even more pronounced by the unfortunate way of showing the sketch on the black field.

The general scheme of the drawings signed with a wreath is much like many others, but there are too many steps. Those behind the statue and immediately about the pedestal are superfluous.

The workmanship on the drawings is excellent, among the best submitted; but the effect of having the frieze ornament slipped down and caught on the base is hardly good architecture.

Your Committee have decided to recommend that you give the medals as follows:

First—Design marked "Columbia."
Second—Designed marked "Cilix."
Third—Design marked "Spear Head."
Fourth—Design marked "Tramp, Tramp, Tramp."
Fifth—Design marked "Athens."

And congratulate you upon the number of drawings submitted.

In making these criticisms of the different drawings it is hoped that the one great deficiency noticed will be appreciated, and that is the absolute necessity of careful study of good existing work to educate one's ideas of design.

Respectfully,

N. CLIFFORD RICKER.
LORADO TAFT.
D. ADLER.
HENRY IVES COBB.
S. A. TREAT.

Besides the gold and silver medals three bronze medals were added, the recipients being as follows: Gold medal, William Bryce Mundie, of Chicago Architectural Sketch Club; silver medal, Arthur Heun, of Chicago Architectural Sketch Club; first bronze medal, J. C. Green; second bronze medal, F. R. Hursh, of Chicago Architectural Sketch Club, now located in New York; third bronze medal, C. F. Bragdon, of Rochester, N. Y., who received the silver medal in the same competition last year.

## Western New York State Association of Architects.

THE annual meeting of the Western New York State Association of Architects was held in parlor "H" of the Iroquois Hotel at Buffalo, New York, beginning November 18, 1890. The meeting was called to order at 3 o'clock P.M. by President J. G. Cutler.

The roll was called by Secretary W. W. Carlin, and the following members were present at the meeting: Jacob Agne, William H. Archer, Otto Block, George W. Baxter, R. A. Bethune, H. C. Burdett, Louise Bethune, James G. Cutler, Charles F. Crandall, J. R. Church, E. A. Curtis, W. W. Carlin, H. L. Campbell, Otto Dockstader, Orlando K. Foote, Ellis G. Hall, J. H. Kirby, W. Foster Kelly, T. I. Lacey, Asa L. Merrick, George J. Metzger, J. H. Marling, J. H. Pierce, C. K. Porter, Charles R. Percival, H. G. Tuthill, Wellington W. Taber, William C. Walker, W. S. Wicks, Charles D. Wilsey, Fred H. Gouge, E. A. Kent.

President J. G. Cutler, of Rochester, briefly outlined the work before the association in a pleasant address, speaking substantially as follows;

Two of the questions to come before you for consideration, the proposed legislation to protect the public from the unqualified architect, and the reorganization of the society to make it a chapter of the American Institute of Architects, would either of them serve as a topic for a paper, which, without exhausting its subject, might easily expand far beyond the limits of your patience. I shall, therefore, permit myself only a brief reference to these matters before passing to a few words of a mere personal nature, with which I shall close my talk. The reorganization is necessary to conform to the national society's plan, and while it is largely formal, it will make some changes in our constitution, and among other matters, involves an important, and I believe wise, alteration in our method of electing members. Gaining in strength and prestige by close affiliation with the Institute, we shall not sacrifice any of the vitality and usefulness which has marked our existence heretofore.

The act to provide for the registration and licensing of architects by the state originated in our society, and was indorsed, with but slight criticism of certain minor details, by the New York City chapter of the Institute. It was introduced at the last session of the legislature, and advanced to the order of second reading without opposition, and seems likely to become a law when taken up again this winter. Its importance is generally recognized, and the comments of the press have been, so far as I have seen them, of the most favorable nature.

Following the example of the Institute, and largely at my instance, a provision has been placed in our remodeled constitution which prohibits the reelection of an officer after the expiration of his second term, and while this provision of our new constitution, if it should be adopted, will not become binding until after our election today, I trust you will act upon its spirit, for the reason that I believe the restriction to be a wise one and likely to conserve the best interests of the Association. It is in this connection that I ask you to indulge me in a few words of a personal nature. I have been three times unanimously elected president of this society. In taking a strong position now in favor of "no third term," I should regret to have any member left with the impression that I have anything but the highest appreciation of the honor which has been done me, and the obligation which such consideration has imposed. It is precisely because I esteem the honor and value your kind consideration that I urge that you should now make it impossible for any member or members to monopolize these favors. There is nothing which more conduces to a high standard of professional conduct than regard for the good opinion of one's professional brothers, and election to the more honorable offices in professional societies is and should be the highest expression of such approbation. If this is so, and I think you will readily admit that it is, every member of such an association should have the high incentive afforded by eligibility to such election rendered effective by a rotation in office, which, and which only, gives every deserving member a chance to secure this valued expression of confidence and approval.

To say that I am grateful to you for the honor which has been done me, is not to say all that I feel, and is not to discharge the obligation which rests upon me, but I could not say less at the time when, after three years of consecutive service as your presiding officer, I shall certainly now yield the chair to my successor. I think you will see that holding these views, it is right that I should say, in conclusion, that my name must not be considered in connection with any office at the following election.

The minutes of the last meeting were read by Secretary Carlin and were approved as read.

President Cutler: The next order of business is the report of the treasurer.

The treasurer, Mr. George W. Baxter, of Syracuse, presented his report covering the period from October 1, 1889, to date. The receipts aggregated $527.33, of which $30 was for admission fees, $250 for dues for 1889 and 1890, and $115 for dues for the year ending October 1, 1891. The disbursements for the year were $294.91, leaving a balance in the treasury of $232.42.

President Cutler: In accordance with the custom, the report of the treasurer is referred to a special auditing committee. I will appoint Mr. Kent, Mr. Wicks and Mr. Church as such committee. The report of the Executive Committee is next in order.

On motion of Mr. Pierce the report of the Executive Committee was referred to a committee before reading.

Secretary Carlin read letters and telegrams from absent members, after which President Cutler announced the next order of business to be the election of officers, and appointed two nominating committees, the first nominating committee Messrs. Baxter, Curtis and Pierce, and as the second nominating committee Messrs. Burdett, Lacey and Walker, and for tellers Mr. Block and Mr. Wicks.

While waiting for the reports of the nominating committees, the secretary read two or three letters, and stated that Mr. Kent and himself, in discussing the subject of neighboring friends, concluded, Sunday evening, to send an invitation to some of the Canadian architects at Toronto, and had received a letter from one of them in answer to it, from Mr. D. B. Dick, of Toronto.

President Cutler: We will now listen to the reports of the nominating committees.

Mr. Pierce: Your committee would nominate the following officers for the consideration of the convention: For president, W. S. Wicks; first vice-president, Otto Block; second vice-president, Jacob Agne; secretary, W. W. Carlin; treasurer, George W. Baxter; executive committee, J. H. Kirby and Otis Dockstader.

Mr. Burdett: The second nominating committee nominate for president, W. W. Carlin; for secretary, F. H. Gouge; for treasurer, Thomas Nolan; for first vice president, W. S. Wicks; for second vice president, Otis Dockstader; for the two members of the executive committee, Asa L. Merrick and J. H. Marling.

Mr. Wicks: I most respectfully decline the nomination for the presidency.

Mr. Agne: As there seems to be only one nomination for president, I would move that the presiding officer cast one ballot for W. W. Carlin. Mr. Wicks withdrew, I understood.

The motion was seconded and carried.

President Cutler: I would announce that I have cast the ballot of the society for Mr. W. W. Carlin, who is now your president. I have much pleasure in extending to Mr. Carlin my own congratulations, and the congratulations of the society upon his unanimous election. [Applause.]

Mr. Cutler was requested to preside until the conclusion of the balloting for officers, which resulted as follows:

First vice-president, W. S. Wicks, of Buffalo; second vice-president, Frederick H. Gouge, of Syracuse; secretary, J. H. Pierce, of Elmira; treasurer, George W. Baxter, of Syracuse; Executive Committee, the officers and J. H. Marling, of Buffalo, and J. H. Kirby, of Syracuse.

Mr. Carlin took the chair as president. Mr. Pierce, his position as secretary.

President Carlin: It will now be in order to bring forward the consideration of the proposed amendments to the constitution and by-laws.

Secretary Pierce read the proposed constitution and by-laws, which were amended and adopted.

Mr. Kent: Mr. President, the Committee on Treasurer's Report have examined the report, figures, etc., and move that it be accepted as read, but wish to couple with it a recommendation to the effect that the delinquent members of last year be given thirty days' notice for the payment of dues, and that if at the expiration of that time the dues are not paid, that the members be dropped from the roll. I move this as a recommendation, if it is in order, in connection with the report.

The motion as seconded, and amended by Mr. Baxter, leaving the matter to the discretion of the Executive Committee, was passed.

Mr. Block: Mr. President, I move that the order of business in the old Western New York Association of Architects' constitution be added to our new constitution, and including under "Order of Business," after "No. 7, Reading Papers, etc." "New Business." Also the synopsis of rules from Roberts' "Manual," and list of members of this association, and leave the number of copies subject to the discretion of the Executive Committee.

The motion was seconded and carried unanimously.

Mr. Agne: If there should be anything in this constitution that would conflict with the Institute constitution, the secretary would have no power to see that this constitution was corrected. It seems to me that it ought to be compared with one of the Institute constitutions, to see whether there is anything there or not which conflicts with it.

President Carlin: This has been done.

Mr. Gouge: I move that the president and secretary be authorized to apply to the secretary of the American Institute of Architects to have this association made a Chapter. Motion seconded and carried unanimously.

The convention adjourned to 9:30 A. M.

### SECOND DAY — MORNING SESSION.

Convention called to order by President Carlin. After the calling of the roll, reading of the minutes of the previous session was dispensed with, and President Carlin announced as the committee to whom was referred the report of the Executive Committee, Mr. J. H. Curtis, of Fredonia, Mr. C. K. Porter, of Buffalo, and Mr. J. H. Pierce, of Elmira.

Mr. Porter: I would like to bring up before this association a resolution in regard to the adoption of a decimal scale for the use of architects. I will state that for many years there has been an attempt made to introduce the use of the French system of measurements among us, and that probably out of sixty millions of people in the United States there are possibly four millions who are now using rules, and it would be almost impossible to uneducate them and re-educate them over into the adoption of what might be termed the French system of measurements, that is, the French meter, which, as you are aware, is some three feet three inches and a fraction larger than our common yard. It is an impossibility for all these millions of people to become educated into a system which is entirely foreign to them, and as all of these people probably are accustomed to the use of the English foot, it seems to me but proper that some system of decimal measurement based upon the foot should be adopted or recommended by this association. Some years ago I prepared a drawing scale upon that basis and sent it to New York and had some scales made. I will state that that was some fifteen years ago, and I have on many occasions used that scale with advantage to myself in the preparation of drawings. I have with me the scale, and also have a resolution which I desire to submit to this Chapter for adoption, if they see fit to do so. The scale I will show so that the members can examine it. It is divided on one side into tenths, subdividing the tenths into tenths making hundredths. Upon the other side it is divided into hundredths, marked "hundredths;" at the same end it is also graduated for fiftieths. It answers very well to our old system of making drawings a quarter of an inch to a foot. By accident after the scale was made I found that it was a perfect translator of the French system of measurement. Having some architectural works published in France, and wishing to refer to the size of certain buildings, I found that by the application of this scale I read it into feet instead of going to the trouble of using the long process of reducing it to meters and getting it back to feet. If any gentlemen wish to look at the scale, it is here for their information. There is no patent on it. There is one thing

in the use of that scale; we sometimes make plans and do not know whether we will receive any compensation for them or not; if we draw them by this scale other people cannot exactly measure them and get our ideas. The resolution is as follows:

*Resolved*, That the Western New York State Chapter of the American Institute of Architects recommend to its members the adoption of the decimal system, using our time-honored English foot as the basis of measurement, and that a committee of three be appointed to prepare and submit to this Chapter, at its next meeting, drawing scales and measuring rules properly graduated for the use of such architects as may adopt the system.

President Carlin: I would like to hear discussion upon this subject before the motion is put to vote, and hear the views of the members. I think myself it is an excellent idea.

Mr. Porter: I do not submit this scale as the one which the committee appointed shall adopt. I simply submit it as one I have had in use for several years, and it is very handy to measure French drawings with, to read them into English feet, and I have found in my practice that this scale many times has been of advantage to me. Sometimes in our profession persons come to us, who may eventually become clients, and ask for sketches; the sketches are furnished, and the next we know of them they are in the hands of some carpenter. This has been the case more particularly in years gone by. Architects are more generally employed now than they were twenty years ago. I see no reason why the decimal scale should not be adopted in our system of drawings and measurements of buildings. The government has adopted the French system, and yet all their drawings for postoffices, etc., are made to scales of ⅛ and ¼ of an inch to a foot. They have never been able to put into practice the French system of measurement. There is no doubt if this system were adopted it would readily be put into practice, as already engineers are using it.

Mr. Curtis: I am heartily in sympathy with the idea of Mr. Porter. We all understand that the decimal system would be very much handier, if put in general practice. Engineers when they come to work frequently ask the question, why we don't use the decimal division, instead of twelfths and sixteenths. The particular difficulty that I see, or the one that will stand in the way as much as anything, is the fact that carpenters, builders and masons have their own rules to measure drawings. I do not readily see how they would comprehend a drawing without anything to measure it with. Perhaps that could be overcome in some way. I think there would be a "kick" on the part of mechanics to the changing of the scale.

Mr. Porter: At the time I had those scales prepared I intended to have rules made to correspond to them. Manufacturers could make them for twelve or fifteen cents apiece, at least for twenty-five cents apiece; cheap rules could be made, graduated in this form. That is one part of the duty of the committee, to arrange for a rule of that kind. My idea was to procure at the time I had this scale made a certain number of those rules, so that when a carpenter or builder came to my office and could not figure, give him a rule. I thought so much of the system, I would have been willing to give the builders a rule. If a recommendation of this kind could be adopted by this Chapter, it would have the moral force of the Chapter behind it, in the place of being simply adopted by one man who is engaged in the profession.

President Carlin: I am heartily in accord with what the gentleman has said in this connection. It seems to be a practical solution of the difficulty to adopt a decimal system. As you are all well aware, the French meter is, as nearly as it can be expressed in feet and fractions, 39⅜ inches, and it always takes a mental calculation when you read of architectural or engineering works in the metric system, to get a comprehensive idea of the extent of the structure or work. You must multiply by 3¼ and call it feet, and throw in a little, and as soon as that is adopted every rule, every scale, every tape measure is practically useless. If a system making the foot the basis of a decimal division is adopted the rules and scales and tapes we have now will answer in a general way for all except the subdivisions of a foot. Our measures are just as correct to measure anything above a foot as those which are to be adopted. I am heartily in accord with the suggestion, and would like to see this Chapter carry out the recommendations of this resolution, and see if we cannot bring some influence to bear, at least in opposition to the adoption of the metrical system in general use. Are you ready for the question? The resolution was adopted unanimously.

President Carlin: I will appoint as the committee under the resolution, Mr. C. K. Porter, of Buffalo, as chairman; Mr. A. Curtis, of Fredonia, and Mr. James G. Cutler, of Rochester. I think under the head of reports of special committees would properly come the report of the committee on the licensing bill, and will ask Mr. Pierce to make a statement of the work of the committee in the last year.

Secretary Pierce: Mr. President and Gentlemen of the Convention,—Not being chairman of the committee, I have no report prepared to present; however, as you will remember, the bill was substantially agreed upon in our meeting in Syracuse, a little over a year ago. It was then given to the committee, with authority to act. The committee immediately set about putting it in shape and working up public sentiment and doing the best we could. The bill was given to Mr. Andrus to introduce; it was introduced in the assembly, passed to second reading, was favorably reported by the committee, and the assembly adjourned. I will say in regard to the bill, that it stands practically as it did upon our examination of it in Syracuse, with the exception that the licensing board, instead of being appointed by the governor, or instead of being appointed from the chief architectural societies of the state, as we originally intended to have it, two from the New York Chapter, two from the Western New York State Association, one from Cornell University, one from Columbia College, and one from the legal profession; we find that with this provision, this way of appointing the board, there was strong opposition. Those of us who met the committee that had the consideration of this bill remember that the members of the legislature who were members of this committee seemed to have the idea, and said so in so many words, that they did not know about the other architectural societies, but the Chapter of the American Institute in New York was a very close corporation, and they did not propose to have this bill enacted, if the members of the board were to be selected from it. Others wanted the governor to make the appointments, which would leave it entirely, of course, political. We had a consultation with Professor Collin, to whom the governor refers a great many bills, and, I think, all bills, before he signs them, for his opinion as to whether they are constitutional or not, and Professor Collin seemed to find a solution of that point of controversy by making the Regents of the University of the State of New York the ones who should appoint the board of examiners, as provided for in this bill. That seemed satisfactory to all parties, and that is, I think, the way the bill is at present. If it is desired, I will read the bill as it now stands, or at least, as it was introduced and passed to the second reading.

President Carlin: The secretary will read the bill, if there is no objection. (Bill printed Vol. XV, No. 2, page 34.)

After considerable discussion and amendments proposed, Mr. Cutler moved that the whole subject of licensing be referred to the Executive Committee, with power to act, and the special committee be discharged.

Motion was seconded and carried unanimously.

Mr. Porter: There is one other point in the bill, if that carries the whole bill, which I understand it would. I would state that when a copy of the bill was sent to me by Mr. Andrus, that I read it over carefully, and that there was one clause which did not strike me favorable; only one particular clause which attracted my attention, but I did not wish to antagonize the bill, because I have believed generally that if the architects can become licensed, it is much easier to amend the bill at a future time than it is to get a bill through the legislature. One sentence here: "But nothing herein contained shall be construed to prohibit any person in this state from acting as designer of his own building." I do not object to that; but the following sentence, "or as designer for any person employing him, with full knowledge on the part of such employer that the person so employed is not a licensed architect in accordance with this act," I do not like. There are very serious objections in my mind to that portion of the clause being retained in the bill, especially after the architects have been licensed, for this reason, that if it becomes known to the public generally that the architects in the State of New York are licensed, and that individuals who are not architects and who are not licensed may be employed to prepare plans by a person knowing that they are not licensed, that there will be a large number of these *quasi* architects brought into existence through the operation of this bill. There is A and B, who, instead of employing a regular architect, will employ an architect, so to speak, who draws plans and gives sketches, because they can get them without paying him much if any remuneration. That is a trouble we have always had; we are troubled here in the city of Buffalo today. There are men making plans who get no compensation unless they get the job. This opens the door for just that sort of thing, in my mind. If a man wants to make his own plan, and have a building constructed from it, it is all well enough, but when he is permitted to draw plans for another person and not receive a license, it strikes me that it is altogether wrong, and leaves the licensed architect just as much at the mercy of these men who make plans without compensation as ever. The object of licensing is to make the profession respectable, and give it a standing before the people.

Mr. Cutler: I agree fully with Mr. Porter in regard to that sentence. As one of the members of that special committee I would say that very point was given careful attention; we were assured by those familiar with the temper of the legislature that that was the only thing that would save the bill, because we would immediately get the opposition of the builder who likes to make plans and of the class of persons referred to in Mr. Porter's remarks, and they would certainly object, because the elimination of that clause from the bill would of course give us a monopoly of all the plan designing in the state, and while it would be a good thing for the public as well as ourselves, I think we shall have to leave that for subsequent amendment.

Mr. Porter: I simply called the attention of the members to my objection to the bill.

Mr. Cutler: I move that a vote of thanks of the convention be extended to the architects of Buffalo for the generous hospitality that has been extended to us upon this occasion.

The motion was seconded and carried unanimously, and the convention adjourned to 3:00 P. M.

## SECOND DAY — AFTERNOON SESSION.

The convention was called to order by President Carlin. The session was taken up with general discussion relative to the license bill before the state legislature. In this discussion Mr. Kent was called upon for facts regarding the registration bill recently passed by the Canadian parliament. The general discussion will show in a general way the difficulties in the way of the passage of such bills in the several states and how they should be met. After the subject had been introduced, President Carlin said:

President Carlin: I would like to call your attention to what is necessary to be done this winter in relation to getting that legislation through. Those of us who went to Albany last winter on several occasions and met the members of the legislature find that there is no opposition developed, and there is not anyone there that we could find who has any opposition to the measure. They all say it is a good thing, and ought to have been done long ago; supposed there was such a law; but what they need is to feel that the architects

of the state are enough interested in that to talk about it and ask for it and appear when there is a public hearing in the matter. It does not do for two or three to go down there; it looks too much like a lobbying scheme. We can work up our members at home, and they can say "We have an architect in my town, and he is in favor of it; he is a personal friend of mine, and it ought to be passed." We must everyone of us constitute a committee of one to do what we can each in our way, and concerted action is the only way to get that matter before the people, before the legislature and through the press. Those of us who have friends on the press can get a copy of the bill published, and get the indorsement of the newspapers as far as possible; it all helps. Last winter we made two or three attempts to make a showing there before a committee. We got lots of promises; we got four or five. I think five was the largest representation we had there. I wish to impress it upon the minds of everyone present, and through them the members of the Association of Architects, who are not members of this association, to do what they can toward getting this thing before the public, so that when our representatives ask questions about it, ask what the particular African in the fence is behind this thing, that they may be somewhat posted on the matter. I would like to ask if Mr. Kent would not like to entertain the convention for a few moments by reading some extracts from the registration bill which has been recently adopted by the Canadian authorities. (Bill printed in Vol. XV, No. 4, page 61.)

Mr. Kent: I am very sorry I have not the bill with me. I think I know the substance of the hill, though; it endeavors to compass a good deal more than we do in the states, particularly in the matter of training students. The prospective architects in the dominion are obliged to register as students, and during their years of studentship, which I believe are five, they can go from office to office, and are obliged to have a record of that fact, and before they can apply for permission to practice they must have had five years' experience in some architect's office in the dominion. I think it is a good thing, but I do not believe it can be carried out in this state. The main trouble with their bill from their point of view is that they got the work "registered" unfortunately inserted in the bill in such a why that legally they would have to call themselves, instead of architects pure and simple, with the understanding that they are licensed, the same as a doctor is licensed, they have to call themselves "registered architects," which is a very objectionable phrase. That was put in by the government before they would allow the hill to be brought up, and in that shape the government itself took the hill up and put it through. They were fortunate in having the whole idea of the hill lodged with the Superintendent or Minister of Education, so that they meet with no such trouble as we have to meet from a lack of enthusiasm at the seat of government about the hill. There is nothing, unfortunately, in the bill, which forces a man in the dominion to go and become a registered architect; he can stay outside and still practice architecture, with one hindrance, that in case he has a claim in a court of law, he cannot recover fees as an architect, unless he exists as a licensed architect, and they were very fearful when this hill passed that it would have no practical results. It is a matter of great surprise to them all that as soon as the bill was passed there was a great desire to be registered, so much so that today I am told there is none who is making plans in the Dominion of Canada who is not registered. Even the country builders are enjoying the reputation of being architects. All came in and got registered properly. This was a great surprise to the men who took the hill through; so that they are in such good shape that they expect to go to the legislature next year and ask to have the word "registered" removed, and some minor amendments in the hill made. They are in good spirits over there because the thing has gone through. They are surprised to see how very beneficial it has become already to them.

Mr. Marling: I would like to ask Mr. Kent whether they did not have to curtail their hill a great deal; were they not in about the same shape as we are? I think their hill left it about as open as ours to outside pirates.

Mr. Kent: It is so that no architect in the dominion shall be able to recover fees in a court of law, unless he be a registered architect; but it does not make it a misdemeanor, as our hill does, for a man to stay outside and practice architecture. His client can pay him his fees if he chooses, without litigation; he can put out his sign and practice and still interfere with the licensed architects; but he cannot do it in this state if the hill gets through, because we make it a misdemeanor to practice outside. Practically, they gained the whole original intention of the hill, from the fact that everybody in the dominion came in and got registered. The provision in regard to securing licenses there, is very much the same as ours. There is a council, consisting of five men, which would correspond with our regents, and they ask certain questions, something like twenty or thirty, and applicants are obliged to pass on all general architectural branches. Of course they are obliged, as we are, to grant permission to practice of all architects in practice, since they cannot be granted permission without examination.

Secretary Pierce: I would say for the instruction of the gentlemen here, or for their enlightenment, in regard to the work of this committee upon the hill, in this state, that to us was a very serious objection, but, after canvassing the ground all over and consulting legal opinion in regard to it, we did not see anyway whereby we could eliminate that evil. The legal opinion was that we could not force, or could not pass any legislation which would ante-date the present time; that is, if a man was recognized as an architect in the community where he lived, he was an architect, and we could not legislate him out of that right. So all that we could do with that was to except those who are in the profession at the present time, providing for having their license revoked, and saying that those who hereafter enter the profession shall pass an examination.

Mr. Metzger: Does the man who sets himself up as an architect and builder come under the same condition?

Secretary Pierce: That was taken out upon the grounds I spoke of, *ex post facto* legislation. If the man is an architect, that settles it. We cannot take his right to practice away from him, and if he is recognized as such by the community in which he lives and has practiced, we cannot legislate that practice away from him.

Mr. Metzger: I think if each of us will, as the president has suggested a little while ago, constitute ourselves a committee to do the very best we can, and visit the members personally and bring the matter before them, we will have far better success than to try to leave it to one individual. I have no doubt everyone of us is acquainted with one or more members of the legislature, and I think if all the members of this association will adopt this plan and gain the interest of members of the legislature through their friends, if they are not personally acquainted with the members, that then we will be certainly assured of far better success and an early passage of the hill. You cannot get any measure through the legislature unless you work for it hard and incessantly.

President Carlin: I entirely agree with Mr. Metzger in this respect. I think if the members in the different places would make it a point to see the member of the legislature when he comes home and tell him that he must vote for it, and if he does not you will not vote for him, it would help very greatly. Each one must put his shoulder to the wheel and push.

Mr. Kent: Does that committee exist at present on the hill?

President Carlin: It was referred to the Executive Committee. I would like to say that in canvassing the subject in the assembly last winter, I happened to be there one Monday. The legislature does not convene until Monday evening at 8 o'clock, but the members are coming in from time to time, and quite a number were there from 10 o'clock on. I spent the day in quietly lobbying around. One of them said, "Would not our country carpenters and people who call themselves architects and builders be opposed to this measure?" One of the other members said, "That ought to be the very reason to urge its passage."

Copies of the hill were ordered printed and distributed to members.

Mr. Porter called attention to an old hook on architecture, printed in 1733, called "Oakley's Architecture." Also a photograph copy of a letter by Michael Angelo, which he had in his hand for inspection. Also a hill of quantities by Sir Christopher Wren, which was in the Buffalo library. A vote of thanks was passed to the press and the retiring officers, and the meeting adjourned, subject to the call of the Executive Committee, it being voted as the sense of the Chapter that this should be at Rochester, which, according to the revised constitution and by-laws, must be held between November 15 and December 1.

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NOTE.—The term of office of members of the above standing committees terminates in January, 1891.

Selection of Columbian Exposition Architects.

As predicted in our last issue, the work of the committee on buildings and grounds of the Columbian Exposition has progressed so that the active work of planning will now begin in earnest, as a board of architects is established, five architects having been selected, although at this date their names have not been made public, but will be as soon as their acceptances are received. This action of the directors was brought about through a report submitted by the consulting architects and engineers to the committee on buildings and grounds, and adopted by the directors at a meeting on December 12, that portion relating to designs being as follows:

Preliminary work in locating buildings, in determining their general areas, and in other elementary directions necessary to proper progress in the design and erection of the structures of the Columbian Exposition has reached a point where it becomes necessary to determine the method by which designs for these buildings shall be obtained. We recognize that your motion in the matter will be of great importance not only in its direct effect upon the artistic and commercial success of the exposition, but scarcely less upon the aspect presented by America to the world, and also as a precedent for future procedure in the country by the government, by corporations and individuals. In our advisory capacity we wish to recommend such action to you as will be productive of the best results, and will at the same time be in accord with the expressed sentiments of the architectural societies of America.

*First.* The selection of one man to whom the designing of the entire work should be intrusted.

*Second.* Competition made free to the whole architectural profession.

*Third.* Competition among a selected few.

*Fourth.* Direct selection.

The first method would possess some advantage in the coherent and logical result attained. But the objections are that time for the preparation of designs is so short that no one man could hope to do the subject justice, even were he broad enough to avoid, in work of such varied and colossal character, monotonous repetition of ideas. And, again, such a method would evoke criticism, just or unjust, and would certainly debar the enterprise from the friendly coöperation of a diversity of talent, which can be secured only by bringing together the best architectural minds of our country.

*Second.* The second method named has been employed in France and other European countries with success, and it would probably result in the production of a certain number of plans possessing more or less merit and novelty.

But in such a competition much time, even now most valuable, could be wasted, and the result would be a mass of irrelevant and almost irreconcilable material, which would demand great and extended labor to bring into coherence.

It is greatly feared that from such a heterogeneous competition the best men of the profession would refrain, not only because the uncertainties involved in it are too great and their time too valuable, but because the societies to which they almost universally belong have so strongly pronounced on its futility.

*Third.* A limited and fair competition would present fewer embarrassments, but even in this case the question of time is presented, and it is most unlikely that any result derived through this cause, coming as it would from necessarily partial acquaintance with the subject, and hasty, ill-considered presentation of it, could be satisfactory, and the presentation of an individual would be open to the same objections made above as to a single designer.

*Fourth.* This is to select a certain number of architects, choosing each man for such work as would be most nearly parallel with his best achievements. These architects to meet in conference, become masters of all the elements of the problem to be solved, and agree upon some general course of procedure. The preliminary studies resulting from this to be compared and freely discussed in a subsequent conference, and with the assistance of such suggestions as your advisers might make be brought into a harmonious whole.

The honor conferred upon those selected would create in their minds a disposition to place the artistic quality of their work in advance of the mere question of emolument; while the emulation begotten in a rivalry so dignified and friendly could not fail to be productive of a result which would stand before the world as the best fruit of American civilization.

The report was signed by Architects Burnham, Root, Olmstead & Co. and Engineer Gottleib, and recommended the fourth plan, that involving the appointment of architects, the committee indorsing the report as follows:

If the foregoing is approved by you (and your committee earnestly hope that this will be the case) we recommend that your committee be authorized to select five architects, or firm of architects, as the case may be, to carry into effect the plan recommended by the construction department and concurred in by your committee.

This recommendation received the prompt approval of the directors, and this much discussed matter of "architects for the world's fair" was permanently settled. It is probable that these five architects will not constitute the

entire board, but will design the buildings already arranged for, other appointments being made, if needed. For instance, if those appointed were all engaged upon the Jackson Park quadrangle there would still be the electric, agricultural, horticultural and other buildings at Jackson Park, and the art building, music hall, etc., on the lake front calling for other appointments. It will be observed that the broad policy indicated in these columns regarding the designing of world's fair buildings, is being carried out to the letter. No competition except the competition of chosen talent, no monopolizing of work by any one architect, but a plan by which the best possible illustration of American architecture is inevitable. The clearness of the consulting architects' report leaves no room for doubt regarding their intention to aid the committee on buildings and grounds in every way to secure the best possible results from an architectural standpoint, and as a professional document the report stands higher than any expression upon ethics or practice ever issued to the profession or the public in this country. It establishes a precedent that will more strongly influence the manner in which public as well as private work will be done, than any other measure, less than a congressional or state enactment. It will aid in destroying the court house competition evil. It is a document that in effect will advance professional practice many years, and as such its authors deserve the thanks of all architectural practitioners, and the country as well, in the improvement in public and private work that will result from the example set of selecting the best talent rather than procuring designs by more or less disreputable competitions.

**World's Fair Board of Control Appointed.**

It has been apparent to those who have watched the proceedings of those directing the Columbian Exposition, that the government commission and also the directory were so large as to be too cumbersome for prompt and effective work. This having been realized by the commission a board of control, of eight members, was established at the last meeting, which will represent the commission as a whole, with almost absolute powers. The eight members of the commission will have different functions from those of the directory, as the functions of those bodies differ, but to the joint board all disputed points will be referred. The board representing the commission appointed by President Palmer is as follows: T. W. Palmer, Michigan (republican); J. A. McKenzie, Kentucky (democrat); E. B. Martindale, Indiana (republican); William Lindsay, Kentucky (democrat); M. H. De Young, California (republican); Thomas M. Waller, Connecticut (democrat); George W. V. Massey, Delaware (republican); J. W. St. Clair, West Virginia (democrat). At the last meeting of the directors a board of reference was appointed by President Gage, as follows: Lyman J. Gage, Thomas B. Bryan, Ferdinand W. Peck, Edwin Walker, E. T. Jeffery, Potter Palmer, F. S. Winston and D. C. Cregier. The board of reference will act for the directory in all questions of difference which are referred to it with power to act, while the combination of the two boards under the title of Board of Reference and Control will form a court of last resort for both bodies. The preliminary work of platting the ground, arranging for proper sanitation, etc., is being rapidly pushed, to advance this work William S. McHarg, a sanitary engineer of national reputation, having been appointed as engineer of sewers and drainage, and John W. Alvord as surveyor. The President of the United States is about to issue his proclamation, having received ample proof of the assured progress of the work.

**Acoustics of the Royal Theater at Vienna.**

The acoustics of the Royal Theater in Vienna have not proved satisfactory and there has been much diversity of opinion among experts as to the causes of the difficulty. The Vienna *Bau-Industrie Zeitung* mentions a novel theory advanced by Herr Moritz Alter, which is said to have many supporters, ascribing the trouble chiefly to the ventilating apparatus. He thinks the currents of warm air propelled by the ventilating fans, in circulating through the auditorium break up and divert from their proper direction the waves of sound, which should be allowed to expand and flow equally in all directions, and that these ventilating currents also convey within the theater noises from the streets. Herr Alter therefore recommends that the operation of the ventilating apparatus be suspended while performances are in progress, being resumed, if need be, between the acts. Thus he thinks the acoustic troubles may be relieved without seriously impairing the sanitary condition of the theater.

**Amateur Management of Chicago Drainage.**

The progress of one of the most important as well as costly drainage schemes ever inaugurated in this country — that of the Chicago sanitary district — after a year spent in mismanagement, has finally been brought to a full stop by the action of the trustees, who with a brief resolution summarily discharged Chief Engineer Leroy E. Cooley, whose discharge was immediately followed by the resignation of the five chiefs of divisions, whose self-respect would not allow them to retain their positions. The cause of this disastrous move on the part of the drainage trustees is that same disposition for amateur management that pervades almost every project of a public nature that is started in this country, from a world's fair to the management of a street-car line, and in the architect's practice, always found in the man who knows more than his architect. It is the same reasoning that said, because Grant is a great general why should he not make a great president; that argues that the greatest financial authority in the country is the best fitted head for a world's fair directory; that makes an eminently successful stockjobber the manager of a street-car cable system that is a nuisance to its patrons and a loss to its stockholders, because the successful manipulator of stocks knew more than his engineer. Now, an eminent jurist is placed upon a sanitary board and, with a majority of his colleagues, assumes a greater knowledge than any engineer living, and they now propose to run this great engineering scheme themselves, at least till another engineer is found to occupy the position. But this will be a hard matter, as no first-class man can afford to take the position in the face of such a precedent as the discharge of Mr. Cooley has established and allow himself to be managed in such an undertaking by amateurs, knowing that his work would certainly result in a gigantic failure and his professional reputation be forever destroyed. The growth of this country has been so rapid from the day of log-house raising and plank-bridge building, which every man did in his own way with his own hands, that it is hard for the average man to acknowledge that there is anything in science or art that he does not fully comprehend. And this country of ours can never become successful in its transition from

primitive execution to a nation renowned for the extent and quality of its engineering feats, until the amateur learns the homely phrase, "every man to his trade," that was so slowly comprehended by the amateurs at Washington, who "ran the war" for three disastrous years, and then reluctantly called a general into the field that, having been given full power, brought victory out of defeat. It may not be too late for the drainage trustees to repair their error. Select an engineer, give him full confidence and full powers and never question his acts, or else ask the state legislature to recall the law and abandon the drainage scheme.

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**Chicago Carpenters and their Employés.**

On another page is printed a paper upon the relation of employer and employé that both might read with considerable benefit. It is apropos at this time, since the recent convention of the Federation of Labor at Detroit sought to reverse the principle that the creator is greater than the creature, and assumes that the employé, whom the federation represents, has and should have the entire control of all questions relating to their labor. Both employers and employés too often absolutely ignore natural laws, especially that of supply and demand, and imagine that a vote of the majority and a mutual pledge is all that is required to establish and control a condition. The strike among carpenters in Chicago last spring and summer resulted in the city becoming filled with men looking for work at extraordinary wages, and the supply was so far in advance of the demand that when the union ordered another strike in September no one was found willing to obey its commands and leave his work. The contractors' association resolved that they would pay a certain scale of wages in order that figuring might be done on an equitable basis. It is now found that a number of members, taking advantage of the oversupply, have hired men far below the established rate. This shows the futility of trying to bind either body when this natural law comes in opposition. The appointment of a committee by the Carpenters' and Builders' Association to meet the arbitration committee of the union with instructions to settle upon hours and wages for the year, and acting upon the platform of the association, which is identical with that of the National Association of Builders, is a move that shows a wish for fair and honorable relations between the association and its employés. It is a move dictated by a spirit of fairness and a regard for placing the association right in public opinion. If the desire of the association is (which everyone who watched its determined opposition to the union and its methods last summer, is sure it is not) to recognize the union, which means to be controlled by it in its business of hiring and directing men, then this policy of meeting this committee is wise. If not, and it is intended to maintain the rights declared by the platform to be unassailable, then it is, in our opinion, a mistake to attempt to compromise the matter. If persisted in this policy will lead to one of two results: either a struggle in which many of the advantages won so hardly last year will be lost, or a total capitulation to the union and its methods. The question should be seriously considered by every member of the association, and either a general rejectment of all negotiations immediately made, or else an agreement entered into with the recognition of the union for its foundation principle, as this is what any negotiation will finally end in, and it is better to have it settled amicably now than in two years from now with the intermediate struggles for supremacy that will certainly occur. How binding or how just any agreement would be when the association represents but does not control all the city contractors, or the union the carpenters, need not be commented upon. But the appointment of the committee will certainly be viewed with favor by the public, and shows the strong desire of the carpenter contractors of Chicago to be entirely just, with no disposition to unduly press the advantage gained through the thorough demoralization of the union in the late strike. While we doubt the policy, and the effectiveness of any attempt at a compromise that will be permanent in its results, we admire the spirit that prompts it.

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**Architectural Competitions from a European Standpoint.**

In another column we publish the code on competitions adopted by the Austrian Association of Architects and Engineers, which we quote from a late issue of *La Semaine des Constructeurs*. The accomplished and experienced editor of *La Semaine* introduces the subject with the following remarks on the conduct of competitions at home and abroad:

> In France architectural competitions are rarely attended by the abuses so grievously complained of in England and yet more in America, where such schemes are often the most barefaced frauds. Nevertheless, in France we are yet far short of perfection in this regard, the numerous complaints received being ample evidence of the need of better regulation.

Architectural competitions seem more satisfactorily managed in Germany than anywhere else. In a region where discipline, method and system pervade everything, as in Switzerland, Austria and North Germany, we find in the announcements of competitions a careful attention to details and a provision of safeguards quite characteristic of the Teutonic race. There seems to be a uniformity of procedure upon a thoroughly matured plan, which has gradually been developed by the leading architectural associations, and which aims to anticipate as far as possible every contingency and to provide for it. We can render no better service in this cause than by publishing this plan in detail, and for this purpose we have selected the Competition Code of the Austrian Association of Architects and Engineers, a code which we consider a model in many respects.

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**A Subject for Illinois Chapter Discussion.**

A pertinent subject for discussion by the Illinois Chapter of the American Institute of Architects at its next meeting would be the best method by which a department of architecture could be established in the Columbian Exposition. No other profession stands in so close relation to industrial and applied art as this, and, indeed, it is difficult to conceive of anything that, in its progress from the raw product to the finished object, does not call upon some branch of architectural skill for its completion. A building being arranged for with the directors of the exposition, the chapter could collect American materials. Communication with the architectural associations in foreign countries would interest them in the project, with similar results in their respective localities. Proper management and earnest work on these lines would evolve the greatest special exhibit of this exposition, and one of the most valuable and productive of information that has ever been collected. Of course, a hall for lectures on architecture and for meetings, departments for drawings, models, etc., would be provided, and the interest aroused by the collection of foreign exhibits would make the calling together of a well-attended world's congress of architects a certainty.

## Architecture and the Environment.

UNDER the above title Mr. Barr Ferree, writing in the current issue of the *Popular Science Monthly*, directs attention to the natural conditions that are essential for successful building, stating that they have never been better set forth than in a letter written by the consul Pliny to his friend Gallus in the early part of the first century of our era, in which he describes his newly-finished villa of Laurentinum, which letter Mr. Ferree quotes in full, but of which only that portion referring to architectural features is given:

"You are surprised," writes Pliny, "that I am so fond of my Laurentinum, or (if you like the appellation better) my Laurens; but you will cease to wonder when I acquaint you with the beauty of the villa, the advantages of its situation, and the extensive prospect of the sea-coast. It is but seventeen miles from Rome; so that, having finished my affairs in town, I can pass my evenings here, without breaking in on the business of the day. My villa is large enough to afford all desirable accommodations, without being extensive. The porch before it is plain, but not mean, through which you enter into a portico in the form of the letter D, which includes a small but agreeable area. This affords a very commodious retreat in bad weather, not only as it is inclosed with windows, but particularly as it is sheltered by an extraordinary projection of the roof. From the middle of this portico you pass into an inward court, extremely pleasant, and thence into a handsome hall, which runs out toward the sea; so that, when there is a southwest wind, it is gently washed with the waves which spend themselves at the foot of it.

"On every side of this hall there are either folding-doors, or windows equally large, by which means you have a view from the front and the two sides, as it were, of three different seas; from the back part you see the middle court, the portico, and the area; and by another view you look through the portico into the porch, whence the prospect is terminated by the woods and mountains which are seen at a distance. On the left hand of this hall, somewhat farther from the sea, lies a large drawing-room; and beyond that a second of smaller size, which has one window to the rising and another to the setting sun; this has likewise a prospect of the sea, but, being at a greater distance, is less incommoded by it. The angle which the projection of the hall forms with this drawing-room, retains and increases the warmth of the sun; and hither my family retreat in winter to perform their exercises; it is sheltered from all winds except those which are generally attended with clouds, so that nothing can render this place useless but what, at the same time, destroys the fair weather.

"Contiguous to this is a room forming the segment of a circle, the windows of which are so placed as to receive the sun the whole day; in the walls are contrived a sort of cases, which contain a collection of those authors whose works can never be read too often. Thence you pass into a bedchamber through a passage which, being boarded and suspended, as it were, over a stove which runs underneath, tempers the heat which it receives and conveys to all parts of this room. The remainder of this side of the house is appropriated to the use of my slaves and freedmen; but most of the apartments are neat enough to receive any of my friends.

"In the opposite wing is a room ornamented in very elegant taste: next to which lies another room, which, though large for a parlor, makes but a moderate dining room; it is exceedingly well warmed and lighted, not only by the direct rays of the sun, but also by their reflection from the sea. Beyond is a bedchamber, together with its anteroom, the height of which renders it cool in summer, as its being sheltered on all sides from the winds makes it warm in winter. To this apartment another of the same sort is joined by one common wall. Thence you enter into the grand and spacious cooling room belonging to the bath, from the opposite walls of which two round basins project, sufficiently large to swim in. Contiguous to this is the perfuming room, then the sweating room, and next to that the furnace which conveys the heat to the baths; adjoining, are two other little bathing rooms, fitted up in an elegant rather than costly manner; annexed to this is a warm bath of extraordinary workmanship, wherein one may swim and have a prospect, at the same time, of the sea.

"Not far hence stands the tennis court, which lies open to the warmth of the afternoon sun. Thence you ascend a sort of turret, containing two entire apartments below; and there are the same number above, besides a dining-room which commands a very extensive prospect of the sea, together with the beautiful villas that stand interspersed upon the coast. At the other end is a second turret, in which is a room that receives the rising and the setting sun. Behind this is a large repository, near to which is a gallery of curiosities, and underneath a spacious dining-room, where the roaring of the sea, even in a storm, is heard but faintly; it looks upon the garden and the *gestatio* which surrounds the garden. The *gestatio* is encompassed with a box-tree hedge, and, where that is decayed, with rosemary; for the box, in those parts which are sheltered by the buildings, preserves its verdure perfectly well; but where, by an open situation, it lies exposed to the spray of the sea, though at a great distance, it entirely withers.

"Between the garden and this *gestatio* runs a shady plantation of vines, the alley of which is so soft that you may walk barefoot upon it without any injury. The garden is chiefly planted with fig and mulberry trees, to which this soil is as favorable as it is averse to all others. In this place is a banqueting room, which, though it stands remote from the sea, enjoys a prospect nothing inferior to that view; two apartments run around the back part of it, the windows whereof look upon the entrance of the villa, and into a very pleasant kitchen garden. Hence an inclosed portico extends, which by its great length you might suppose erected for the use of the public. It has a range of windows on each side, but on that which looks toward the sea they are double the number of those next the garden. When the weather is fair and serene, these are all thrown open; but if it blows, those on the side the wind sets are shut, while the others remain unclosed without any inconvenience,

"Before this portico lies a terrace, perfumed with violets, and warmed by the reflection of the sun from the portico, which, as it retains the rays, so it keeps off the northeast wind; and it is as warm on this side as it is cool on the opposite; in the same manner it proves a defense against the southwest; and thus, in short, by means of its several sides, breaks the force of the winds from whatsoever point they blow. These are some of its winter advantages; they are still more considerable in summer; for at that season it throws a shade upon the terrace during all the forenoon, as it defends the *gestatio*, and that part of the garden which lies contiguous to it, from the afternoon sun, and casts a greater or less shade, as the day either increases or decreases; but the portico itself is then coolest when the sun is most scorching — that is, when its rays fall directly upon the roof. To these, its benefits, I must not forget to add that, by setting open the windows, the western breezes have a free draught, and by that means the inclosed air is prevented from stagnating. On the upper end of the terrace and portico stands a detached building in the garden, which I call my favorite; and, indeed, it is particularly so, having erected it myself. It contains a very warm winter room, one side of which looks upon the terrace, the other has a view of the sea, and both lie exposed to the sun. Through the folding doors you see the opposite chamber, and from the window is a prospect of the inclosed portico.

"On that side next the sea, and opposite to the middle wall, stands a little elegant recess, which, by means of a glass door and a curtain, is either laid into the adjoining room, or separated from it. It contains a couch and two chairs. As you lie upon this couch, from the feet you have a prospect of the sea; if you look behind, you see the neighboring villas; and from the head you have a view of the woods; these three views may be seen either distinctly from so many different windows in the room, or blended together in one confused prospect. Adjoining this is a bedchamber, which neither the voice of the servants, the murmuring of the sea, nor even the roaring of a tempest can reach; nor lightning, nor the day itself, can penetrate it, unless you open the windows. This profound tranquillity is occasioned by a passage which separates the wall of this chamber from that of the garden; and thus, by means of that intervening space, every noise is precluded. Annexed to this is a small stove-room, which, by opening a little window, warms the bedchamber to the degree of heat required. Beyond this lie a chamber and antechamber, which enjoy the sun, though obliquely indeed, from the time it rises till the afternoon. When I retire to this garden apartment, I fancy myself a hundred miles from my own house, and take particular pleasure in it at the feast of the Saturnalia, when, by the license of that season of festivity, every other part of my villa resounds with the mirth of my domestics; thus I neither interrupt their diversions nor they my studies."

"This remarkable letter," says Mr. Ferree, "was written in a civilization different from ours, when society and culture were developed in another spirit; yet the principles it so clearly illustrates are as much in force today as they were then, and the lessons it teaches as important to us as they were interesting and profitable to the friend to whom they were addressed. It matters not that the description is of a building erected more than eighteen hundred years ago, which has long since passed from the face of the earth. The truths involved in its construction are as real today as when the letter was freshly written, and great as is its archæological interest, its chief merit is the admirable way in which it describes the model dwelling. Pliny was not an architect, but he was a man of keen observation, a student of nature, and possessed of sound common sense, which he never exercised to better advantage than in the erection of this building. His description shows us that utility is the chief consideration, first, last, and all the time, that should be observed in constructing a house. Coupled with this are the conditions imposed by the environment, the taking advantage of the natural situation, the direction of the wind, the heat of the sun, the requirements of temperature and climate, all of which must receive due attention in good and economic building. Ornamentation, decoration, design, esthetic effects, and other elements which are popularly supposed to compose architecture, are either neglected altogether or put to one side as matters which may receive attention after essential things have been considered. The Romans were fond of ornament, they loved to overload their structures with decorations of all kinds, and the number of statues employed in some of their public buildings was prodigious; but Pliny's letter shows there were at least some among them who looked at architecture through the lens of common sense, and it is to them we must go in our search after truth.

"Adaptation to its use was the chief element in Pliny's villa, the basis on which it rested, and the plan on which it was designed. There was no insistence on the beautiful or the elevation of artistic form to the chief place, but everything was arranged as convenience dictated or sense suggested, and all was in consequence admirably suited to the requirements of the owner. It was in these things that he found satisfaction, while if any part was arranged with elegance, so much the better; but as long as he was comfortable, as long as his windows opened on refreshing views, as long as every advantage was taken of the shade in summer or the heat of the sun in winter, as long as there were convenient and accessible places of retreat as well as ample rooms in which to entertain the guests, there was no fault to be found, and as the owner was satisfied, who could complain?"

According to the writer, "the pleasure that Pliny derived from his villa is in striking contrast to the dissatisfaction that is expressed with modern buildings of all kinds — not dwellings alone, but stores and offices, churches and public buildings; with those erected in an inexpensive way, and those on which unlimited sums have been expended. The fault-finding is not a subdued murmur, but is general and outspoken, and, in the absence of any other object, is aimed at the architect, sometimes with a vigor that should be sufficient to arrest his attention. And the architects are largely to blame; for, as the leaders in the architectural movement, they naturally have a fuller acquaintance with the subject than a man who builds but one house in a lifetime, and if they do not correct errors in construction, it is difficult to see who else is to be held responsible. The reasons for this state of things are obvious. Every man who undertakes to build a house seeks to make it a model dwelling, in which the faults of every other building he is acquainted with will be corrected, and everything arranged to suit his ideas of comfort and utility. He begins with well defined views, knows exactly what he wants, and lays them before the architect. The latter undertakes to please his client as best he may and prepares — a design. Possibly the plan is in accordance with the programme laid down, but it is by a picturesque exterior, a pleasing elevation, a beautiful drawing that he hopes to captivate the eye and fancy of his customer. Other architects have made their reputation by their exteriors, and the most successful of all has obtained his fame by some great structure whose façade surpasses in beauty any offered by his competitors. Like a flock of sheep blindly following the leader, they go on preparing design after design, such as it is supposed the client will like, until an immense portfolio of pictures will be accumulated which may be very pleasing to look at, but which are simply drawings intended to catch the eye. The plan, the arrangement of the parts of the house, the convenience of the occupants and all similar questions are too frequently left to be filled in afterward, and made to fit the exterior instead of the exterior being made to express them."

Here occurs the remarkable statement that "architecture, in fact, has ceased to be an art, and has become a fashion. We have styles in architecture just as we have styles in dress, and the changes in public taste are as capricious in the one as in the other. The rule of fashion is the most arbitrary and idiotic form of government to which human beings have ever submitted themselves, and it is not less so in architecture than in dress. Our buildings are put up now in one style, now in another, not because one is more suited to the purpose of the structure, not because it is better adapted to the climate, not because it more freely expresses our culture and our civilization, but because we want a change — because our streets are growing monotonous, because we must alter our structures to conform to the new style, and thereby give evidence of an improved taste and furnish profitable work for the architect and good jobs for the laboring man. As to what is behind all this — the structure itself, the part which calls the façade into being, to which it is really not more than a lid or screen to shut out inquisitive eyes — it does not matter. An Italian front does not necessarily imply an Italian house, nor a Moorish façade suggest the rich, luxurious, sensual life of the south. Variety is indeed the spice of life, and it is an admirable idea to give a diversity to our streets and erect ornamental façades to our buildings; but when we pass over all thought of convenience, of utility, of adaptation to natural conditions, and judge of buildings solely because one is better looking than another, we have passed the dividing line between sense and absurdity."

The deduction from the above is that "from the modern point of view it is a misfortune that buildings must be used. Were they only intended to be looked at, could they but be preserved in glass cases in the galleries of some gigantic museum, there would be no complaints, no fault-findings, no grumblings. If houses were not to live in, architects could pursue their occupations without inconvenience, and design fronts and windows and turrets and all sorts of knick-knacks to their heart's content. Unfortunately, this ideal state can never be realized; and, as people must conform to the designs of architects — must have turrets where they do not want them, windows where they are least needed, and all sorts of beautifications because they are in the latest style — there is constant conflict between builder and occupant, between architect and client. Nor could anything else be expected when buildings are judged solely by their esthetic appearance. The history of architecture carries the comforting assurance that structures can be both beautiful and useful; and, in fact, in the best buildings the two elements are so closely united as to be scarcely distinguished. In our time, however, attention is paid to only one of them, and it is, therefore, impossible to obtain satisfactory results."

"Writers on architecture make a broad distinction between construction and architecture, claiming that they are two different things, and that, while all architecture is construction, all construction is not architecture. Never was a difference productive of more perverted ideas. A factory is not architectural, because it is plain, unadorned construction. Put on some ornament, add a fancy roof, a cornice, and a balcony, and it at once becomes architectural, though none of these things have aught to do with the uses of the building, but frequently conflict with them. Such a definition may be maintained in order to have certain limitations, but it is clearly absurd to say that a building only properly comes within the province of architecture when certain adjuncts are added to it which, while they may increase its esthetic appearance, detract from its usefulness."

"The history of architecture is the story of the attempt of man to adapt his life to the environment in which he is placed. The Abipone under his mat, the Assyrian in his thick-walled house of brick, the Roman in his conveniently arranged villa, the medieval baron in his castle, the French monarch in his richly appointed palace, are but so many instances of the influence of climate and geological conditions, nature of the soil, products of the land, extent of intercourse with other peoples, temperature, rainfall, manner of living, and many other phenomena which have caused the evolution of various grades of society, and which thus express themselves in visible form. In Assyria the buildings were of clay, because that was the only substance the land afforded. In Greece they were of stone, because it was abundant and easily obtained. The medieval baron intrenched himself in a heavily guarded fortress, because the country was in an unsettled condition and was infested with freebooters. A change passed over society; laws were enforced, police regulations made, society became settled and calm, fortifications disappeared, and in their place arose châteaux and pleasant villas that were admirably suited to a free and peaceful life. Each style, in fact, originated in the various operations of natural conditions; each form had an evolution of its own, that had as definite and as readily ascertained causes as those which produced the evolution of any other form of culture. Reason and common sense, usefulness and intention, were the great factors on which all architecture rested; and when these things were neglected — when an arbitrary decree of fashion or the development of a new "taste" became the criterion by which all buildings were judged — architecture fell. This calamity occurred with the introduction of the Renaissance in the fifteenth century, and its results are still apparent."

"Natural conditions are apt to be forgotten in this busy life of ours. We have no time to spend in applying the problems of perspective to architecture as did the ancient Greeks when they used curved lines instead of straight, in order to correct the distortion caused by distance. Our crowded cities, where land has reached fabulous prices per foot, afford no opportunity for taking advantage of the conveniences of an ample site. But, though we may not be able to concern ourselves with such matters, there are a multitude of other details, that can be attended to which are now more or less neglected, and which, were they intelligently treated, would remove much of the present reproach from our architecture.

"For many hundred years architecture has been occupied with solving problems presented by nature. In earlier times life was comparatively simple, and artificial needs were few and easily satisfied. Now, however, we have countless mechanical contrivances that have entered closely into our lives, and the problems of architecture take a different range. Steam and electricity have revolutionized society. They have brought the furthermost parts of the earth into intimate connection. Our lives are one continuous hurry, and the laggard is soon left behind in the rapid march of progress. In the cities land is scarce and valuable, and room is only to be had by expanding upward instead of laterally. Inventive genius has supplied us with elevators, steam heat, electric light. Questions of public safety, correct sanitation, guards against fire, protection against burglary, safe means of rapid ingress and egress, have formed other conditions. The spread of manufactures, the making of artificial building materials, as iron and glass, have given us new forces. New methods of business and the constant and rapid introduction of new occupations have presented fresh problems with which to deal. The increase of great corporations, the building of railroads, new forms of transportation by water, the changes of life in every state, have caused new difficulties for the architect, all of which must be correctly solved if we are to make any true progress.

"In our houses, stores, office buildings, hotels, homes, factories, machine shops, depots of construction, warehouses, churches, dwellings and places of amusement, there is a constant need for the application of new ideas and the devising of new methods. The work that is before our architects is immense, and the way in which they apply themselves to it will largely influence our future advancement. Yet in the face of all this the battle of the styles waxes furious; and if one obtains a handsomer building than his neighbor, he is told not to complain of its inconveniences, but to be satisfied that he has got so much. There never was a time when the need of a practical architecture was more pressing than now, and there never was a time when it was so persistently neglected.

Mr. Ferree concludes by asking: "And what is a practical architecture? Is it one in which beauty is sacrificed to utility, where plainness is to be preferred to ornament, where art is subordinated to engineering? Not at all; we can have beauty and utility, art and engineering, all in one building, and still be practical and in line with good architectural work. It is true that many "practical" buildings are extremely ugly, and many great works of engineering eminently hideous. It is small wonder at times that there is a revulsion against the practical and a demand for more of the beautiful; but the error here is as great as when beauty is sacrificed to utility. Use is by no means synonymous with ugliness, and it is quite as important to combat such a view as to condemn beautiful things because they are useless. Practical architecture does not imply any compromise between the two elements, but it does imply a strict application of common sense to all material things. There is no reason why architecture should be denied the treatment from the point of view of sound sense that is given to every other department of thought and progress; it is too closely connected with the necessities of life to be made the victim of absurdity.

"There is scarcely a limit to the number of examples of the neglect of natural conditions that may be gathered from the architecture that prevails among us. In the search for the beautiful, the demand for impressive façades, the taste for complicated ornament, and a most singular appreciation of the odd, the grotesque, and the ugly, there is little attention paid to matters which seem self-evident and are of really vital importance. Windows are arranged to suit a symmetrical façade, whether they are just what are needed for the rooms or not, and, even where it is possible, little attention is given to the direction of the sunlight in order that the living-rooms may receive

the full benefit of the natural warmth, nor are those rooms where it is not needed, or minor offices, relegated to the exposed side. The most important external feature, the door, is seldom adjusted to the climate. Even in large office buildings, hotels and churches, where there should be ample space for every structural convenience, the door is frequently of cramped dimensions, and, instead of being preceded by a porch, which would be an integral part of the architecture, and which is absolutely essential in our long, cold, damp winters, is boarded up with "storm doors" that are not only hideous in design but an actual obstruction. With the rapid increase in the value of land which has taken place in all our large cities in late years, a wild fear lest any inch be wasted has resulted in a compactness of plan that is frequently painful. The housekeeper longs for the roomy closets and ample storerooms of the old buildings; the fine hall that once formed an imposing and appropriate entrance has given place to the narrow entry through which it is frequently impossible to carry the larger articles of furniture. The same difficulty is experienced in the sharp, frequent turns which characterize so many stairways. Bedrooms are pushed into corners where they seldom have the benefit of pure, free air and the heat of the sun, for no other reason than that space is required for ample reception rooms and state apartments.

"The same indifference to the true ends of building are to be noted in public edifices as well as in private ones. Offices are small and frequently without light. In many churches it is impossible either to see the preacher or to hear him, and some of our public halls are not much better, while, as a crowning touch, the seats are placed so close together as to render them the very acme of discomfort to all but dwarfs. Nor are these structural differences the only ones that call for improvement. There are a multitude of modern contrivances that are yet in an undeveloped state. Questions of drainage, of heating, of artificial light, of elevators, of protection against fire, of ventilation, and the very means of supporting life, are not seldom denied us in structures that astound us by their size and which have cost vast sums. It is not because these things are expensive that they are neglected, nor because they are out of the range of our mechanical powers, but because they are looked upon as adjuncts to the buildings to be taken up at some later time and are then never given the strict attention they require. A draftsman who has prepared a design that captivates him by its beauty, and seems destined to win a much-desired prize by its mere art superiority over other drawings, is too apt to forget that, after all, he has neglected the consideration of utility; and that on the perfection of the adaptation of the structure to human needs must depend its real value, its true measure of success.

"The Great Pyramid of Egypt, which is among the most ancient monuments in the world, has survived for thousands of years because each stone had a definite place, in which it was set with the greatest care. It owes its size and its endurance to a strict attention, on the part of its builders, to small things, and the exercise of an almost limitless patience. It teaches a profound truth, that in architecture no single thing is too unimportant to be treated in the best way; and, though we need not seek to erect buildings whose permanency will be of the type of the Pyramid of Cheops, we can at least apply to our structures the same care for the minor parts, believing that, as the members are, so will the whole be.

"Architecture must express the life of any people in order to be successful. It is this which makes former styles so admirable, and it is this element that is so sadly wanting in our own. We must not make our lives conform to our buildings, but our buildings must conform to our lives. They must express not only our culture and our tastes, but the land in which we live and the environment in which we are placed. This can never be accomplished by erecting buildings for their exterior only, and until our architects learn to treat the plan and disposition of the building as the chief part of the structure we can never hope to be rid of the discomfort that makes so much of our daily life unbearable. The Gothic builders achieved success, not because their buildings were beautiful only, but because they filled every natural requirement. It is impossible to delude ourselves with the thought that we are equally successful simply because we happen to live in a house with a Gothic front, but which subjects us to hourly annoyances by the total absence of the conveniences and necessaries of modern daily life."

## A New Office Building at San Francisco.

ARCHITECTS BURNHAM & ROOT have been employed by D. O. Mills, of New York and San Francisco, to design an office building in the latter city, about the size of the Mills building in New York.

The gentleman is now considered one of the wealthiest men in this country. Starting as a banker in Sacramento in early days he amassed a large fortune there, and has since been known for his connection with great banks, railways, landed properties and newspapers. He owns the great estate of Milbrae, just out of San Francisco, and is now having a beautiful estate laid out near New York. The New York *Tribune* is controlled by his family, and Hon. Whitelaw Reid, its editor, and present minister to France, is his son-in-law. He is a man, in fact, of widest knowledge of men and of buildings, able to go where he will and do what his judgment may dictate.

His action was after mature consideration and careful examination of the work of all the architects in this country. The final event was characteristic of the man's whole career. He wired that he would like to see one of the firm in New York, and within an hour of the gentleman's arrival, had made a written contract according to the Institute schedule and also an appointment for a meeting in California. The work is now well under way and bids fair to outdo any previous performance of these architects.

## An English View of the Convention.

IT is sometimes well to "see oursels as ithers see us," and under the title "Congress of American Architects" the *Architect*, of London, reviews the report of the last convention of the American Institute of Architects. The reading of these deductions of the *Architect* can be beneficial to every member of the Institute, as even its very evident misconception of the extent and influence of the Institute, or the real status of architectural affairs here, will show how carefully each report should be written and each measure considered before being presented to a convention. It is sufficiently instructive in many respects to be given in full.

It is difficult for any one out of America to assess the value of the convention which was held a month ago in Washington. The reports of the meetings do not convey a notion to a stranger that advantageous results followed so much speaking and voting. Nor can it be said that the resolutions appear to represent the opinion of American architects, for there were only about a hundred members present, and at most seventy-six took part in the voting. If the architects who met in Washington, however few in number, could be all considered as representatives of various local bodies, the proceedings might then be taken as indicative of the desires of the profession throughout the states; but all that can be stated is that some of the members who were present are sufficiently prominent to secure attention for whatever they may say or do, although they may not appear on behalf of a chapter or a town. Apart from the reported proceedings of the meetings, it may be assumed that something was gained by bringing a hundred architects together. The struggle for existence is not less fiercely fought out in America than in England, and it is well to have occasional intervals when combativeness is not exercised. The president, Mr. R. M. Hunt, in the address which he prepared, although through illness he was unable to attend or read it, gave prominence to this consideration. Everybody who attended the conventions would, he said, be able to appreciate the gain in fellowship, and he testified that out of personal acquaintance had grown both mutual respect and esteem. It must be said, however, that nothing was manifested to denote much of a change in the relation between architects in practice since the conventions were inaugurated.

The failure to establish a professional code is evidence that as yet individuals think more of their own success than of any community of interest, unless when the latter can be made to aid the former. It should be remembered that the committee on ethics have been three years at work. What have they discovered? A tendency toward a business rather than a professional conduct of architecture; the business men "look with contempt upon the older methods," while "those who follow time-honored methods look askance at the new, and are irritated and ruffled by any departure from what they regard as the strictly legitimate." There is also a class of architects, and we fancy numerically they are the most important, "who are much more concerned in filling their bellies than in splitting hairs with nicety, and who look with cynicism on all methods, including their own." What bond can be found to unite men whose theories of conduct are so much opposed? It has to be admitted that "these three elements have representation in the Institute," but as it is unknown what are the proportions, a code for one class would hardly satisfy the others. As is common with reformers who have to succumb to necessity, the committee comfort themselves by fancying "that in due time the varied interests and views held in the profession will have coalesced and unified through a gradual series of modifications." It is to be hoped the adherents to old-fashioned canons of morality will eventually gain predominance, as "between him of social equipoise and professional dignity at the upper end of the scale, and the hustling gorilla at the lower, are to be found all the transitional gradations," but the chances are in favor of the cynics, for their methods have become a sort of national institution. An architect with an aversion to "splitting hairs with nicety," in morals as in art, on that account can claim to be akin with the majority of Americans. As Mr. Emerson says, "The darlings of nature, the great, the strong, the beautiful, do not come out of the Sunday-school, nor weigh their food, nor punctually keep the commandments." They see that nature is no saint, and who can wonder if they think of the profit which a commission can render, instead of theories of moral obligations? The late T. U. Walter did believe in ethics as well as in style. His buildings in Washington, according to the president of the convention, "show careful study and are characterized by dignity and repose strikingly in contrast with much in their surroundings," but "while the nation has thus just reason to be proud of his work, congress remains indifferent to the appeal of Mr. Walter's family for just remuneration for the faithful services his work represents." Could there be a more forcible argument for the wisdom of the cynics, if not of the gorillas, who provide for themselves and their heirs at all costs, and thus save congress from unfavorable judgments of critics like Mr. Hunt.

The educational problem appears to offer almost as many difficulties as ethics. A report from the committee was not forthcoming. The secretary, however, suggested that interference with existing schools was not advisable, and it would be well to limit the operations of the committee to collecting information about attempts made by small local architectural societies, chapters, or individuals to provide and spread information of a generally useful sort. According to Mr. Hunt it is no longer necessary for the American student to go abroad for education, unless he may have obtained one of the traveling scholarships which were lately founded. As Mr. Hunt has had experience of European training he is not likely to undervalue it, but he advises students from technological art schools to spend a couple of years in an architect's office prior to crossing the Atlantic.

When the American student settles down as a practitioner, is he to stand alone or to become a member of a society? In theory the

American Institute is a national institute, in which a place for every respectable architect is to be found. Hard-headed critics, who believe that power is to be tested by finance, cannot of course think much of a body of men who are unable to obtain more than $4,096 from a year's initiation fees, dues, fines, etc., and who have a balance of $1,605. In spite of all the eloquence that is expended, members of congress and other public bodies must look down on an Institute that in wealth is so far below the humblest laborers' society. It is no wonder, therefore, that the executive committee of the Institute should desire to see a large increase of members, from whom supplies can be drawn; and accordingly it was recommended "that the utmost encouragement should be given to the formation and the continuance of the chapters." But in order to insure that profit should arise to the central authority from the chapters, they are to consist of members and associates of the Institute. If otherwise constituted there is no recognition of a chapter. Five members of the Institute are sufficient material to form one of those bodies; but where, as at San Francisco, there are four members with thirty-two non-members; or at Pittsburgh, where there are three members with sixteen non-members; or other chapters, where the members of the Institute are also in a minority, they were disregarded as illegitimate. Although it may be wise to obtain as much money as possible, the fact cannot be ignored that too much exercise of authority at headquarters may cause the chapters to ask what is gained by being bound to so volatile a body as is the Institute? If the chapters stand on their independence the Institute must share the fate of all unsubstantial pageants. It was therefore well that Mr. Adler came forward in time to use his influence, by declaring that further proposals for meddling with the chapters was inopportune. Next year the subject is to be further considered, if a report on the organization of the chapters be forthcoming.

It is not to be supposed that the chapters are inspired by any more generosity than larger societies. A revelation of the spirit which actuates them is to be found in an affair which has busied the San Francisco chapter. A Mr. Laver, a member, was the architect of the city hall. When the main part of the building was sufficiently advanced, he prepared two designs for the tower. The city authorities, with Mr. Laver's consent, submitted them to the chapter. He received a report from his fellow-members, which expressed their approval of one of the designs; but he was surprised to learn that, instead of a duplicate, a report of an adverse character was sent to the city council. Mr. Laver withdrew from the chapter. It is needless to say that when the matter was submitted to the convention there was a resolution passed in favor of treating the case with neglect. "Masterly inactivity" invariably inspires the policy of architectural societies when the reputation of a member is at stake, and the course adopted at Washington was strictly according to precedent.

That the people of America are not at present prepared to indorse all that may be recommended by the Institute is evident from a report of the committee on the employment of clerks of works. It is stated that "in large cities, especially in the East, there is a growing inclination to recognize that an architect is not paid for constant and continuous superintendence, yet it will be many years before the same feeling is general and before the Institute can attempt to demand the employment of assistant superintendence throughout the country." As far as may be judged by what is known in England of the Institute, it seems likely that such demands will be entirely disregarded, for although, according to a practice that is too common, credit may be taken for many things, the Institute as a body has hitherto seemed to have gained nothing for American architects. The committee admit that clients believe, "and in this they are supported to a surprising extent by legal opinion, that an architect is in the position of chief builder in the commercial and responsible sense, as well as in the technical, and they put him in the position of the contracting party, with the real contractor as his employé or subordinate." The committee make no attempt at denial of the architect's responsibilities. They recommend that an explanation be given of the value of his services, and that seventeen or eighteen per cent would have to be paid if the supervision were not limited. It is also said that there should be an addition to the authorized schedule showing the rates at which the services of a clerk of works could be obtained. Thirty dollars a week was named as the average sum to be paid. There are so many amateurs who get hold of contracts in America, especially for public works, the necessity for constant watchfulness ought to be evident to all who have to pay for building. But since there was a show of combined action on the part of some architects, clients have become suspicious of arrangements which may be advantageous to them.

The report appears to admit this when it states, "It seems strange in these days of carefully-written agreements there should be such frequent misunderstandings of common relationship of architect and client." Misunderstandings will more often arise if the relation of responsibility by the architect, as proposed by some members, should become common, and as the Americans are not disposed to follow ancient examples, it is not improbable that one day they will insist on having two independent classes of architects — one for the preparing of designs, and the other for carrying them out. It is difficult to see how in all cases a clause can work which announces that "the architect's superintendence shall not include liability or responsibility for any breach of contract by the contractors." That is whittling away the agent's position until nothing remains, and it might be supposed the clause was intended for the benefit of the "hustling gorilla." Although a building-owner must adhere to an agreement of the kind if he should sign it, we doubt if such a declaration of independence would be long tolerated in England. The decision lately given against the engineers of the Broadstairs drainage works shows that the courts now apply a very rigorous test to discover the liabilities of agents when they represent employers in works of construction, and that it is no easy matter to make it clear in case of failure that care and judgment were exercised. In America also the judges do not want discernment, and the architects, in endeavoring to make assurance doubly sure, would do well to remember that the adoption of their agreements is not compulsory, and the building-owners can insist on very different conditions if they please. One of the members said it was necessary to have an agreement of which they could say, "This is authorized by the American Institute of Architects," the same as the Supreme Court could say, "This is the decision of the Supreme Court"; but words of that kind are only imaginative, and signs of a deficiency in discriminating between things. One reason brought forward against an assumption of responsibility is that incompetent or dishonest contractors are often employed because they send in low tenders. But a resolute architect can overcome men of that class and compel them to carry out conditions faithfully. As a matter of fact and of law, responsibility cannot be easily evaded by an architect, even when he practices in America. Mr. Upjohn, who is one of the oldest members, declared, in giving a certificate, there is an admission of responsibility for the accuracy; and if the figures are incorrect the architect becomes accountable if a loss should arise. He put it in another way when he said that the failures of doctors can be put underground, but a building stands always as evidence against an architect. It is no doubt onerous to have so much responsibility; but if architects are afraid, men of another sort will be glad to take their places.

Like most other subjects brought forward at the convention, there was a postponement of the decision about the liability of architects. They will act wisely if there is a further adjournment when that time comes. American clients are like those of other countries who give commissions to architects, because it is believed there is an advantage in doing so. The clients may say, like the compilers of the French code, "*La bonne foi est toujours présumée*"; but when the risks are so great they believe it is well to have something else. Sometimes in America security is supposed to be given by making the architect a party to the contract; but, whatever may be the extent of the precautions, nobody can imagine that an American client would be satisfied if an architect failed to restrain a contractor when he was not faithfully carrying out the conditions of the contract. Is it not dangerous to the profession to give grounds for the supposition that the architect wil not worry himself about such matters, and is indifferent to the disappointment of a client when he discovers that the employment of an architect affords him no security, and that it is cheaper and quite as safe to trust the contractor? When we find an architect saying at the convention, "I believe that the owner should look to the contractor and to the contractor alone for the enforcement of the contract—the supervision of the architect to the contrary notwithstanding," is it not plain that the supervision is a superfluity, if not a sham?

The conclusion to be drawn from the convention is that the reports were immature, and when so much was left over for another annual meeting the architects are not likely to profit much by the proceedings. But as the committees can amuse themselves with preparing additional reports, and as numerous opportunities are given for issuing new circulars, some members may say the purpose of the convention was realized. However, the day seems distant when the reports or circulars will be accepted by the American people as being of equal value with the recorded decisions of the Supreme Court of the United States.

## An Age of Steel and Clay.*

BY W. L. B. JENNEY, ARCHITECT.

LONG ago, architects recognized that the tombs, the monuments, the temples that are left to us by people long passed out of history, are a sure indication of the habits, manners, customs, religion and the arts of the people who built them, as adapted to the material obtainable. Moreover, these buildings, often magnificent, are but the enlargement in a more permanent material of the homes and the tombs of the prominent citizens, and even of the huts of the common people. The columns of the great temples on the Nile are often but an imitation in stone of bundles of papyrus reeds, and the entire temple shows its origin in a house built of these reeds and clay. Here was at first an age of reeds and unburned clay, and later, as civilization advanced and the nation became powerful and the government more thoroughly organized, there was an age of stone. Like the old subdivisions of the ethnologist, an age of stone, rude or polished; an age of bronze and an age of iron, which were reproduced over and over again by different people according to the state of civilization; so the different ages of building, such as the age of reeds, of clay (unburned and burned), the age of stone and the age of iron have appeared and held sway for more or less centuries, influenced by the environment. The age of reeds still exists in China and among the Malays, and among many savage tribes. The same is true of unburned clay. The age of bricks existed in Chaldea and Assyria, where the broad alluvial plains furnished abundance of clay, while all other building materials were difficult to obtain. So long did these nations exist in a high state of civilization that they invented most of the forms and methods of brick and brick construction known today: the unburned brick of clay and straw, the kiln-burned brick of numerous forms, enameled brick, plain and decorated and of many colors. The old stories that the round arch was of Etruscan invention, and pointed arch Gothic of the middle ages, is here given the lie. Both of these arches are found built in brick with radial joints in the valley

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of the Euphrates and the Tigris, dating some twenty centuries before Christ, some of them in beautiful figured enameled brick.

The age of stone existed in all its perfection in Central Europe in the middle ages. There stone was used in the great cathedrals with all the skill and all the knowledge that has ever been applied to similar stone construction. The most careful analysis of the construction of such great cathedrals as Rheims, Amiens and Rouen develops a knowledge of the arch and the pier that the architects of today could not excel. The entire interior is of cut stone. The arch ribs carry a stone ceiling. The thrusts are taken by an elaborate system of graceful flying buttresses. The walls reduced to piers between great windows filled with painted glass. The least amount of stone consistent with stability; and yet this thirteenth century work is in good preservation today, magnificent monuments illustrating the science and the art of the age.

This age of stone passed away and a more complex age appeared; an age of stone, brick and wood, cheap and quickly constructed, made necessary by the advance of civilization, the increase of commerce and manufactures and the rapid growth of the cities. Brick walls sometimes faced with stone, wooden joists (interior posts of wood or iron), columns in the street fronts of cast-iron. These buildings with their wooden joist, stud partitions and wooden lathing were combustible, and great fires often occurred, at times destroying entire cities and causing great losses. Something more stable was necessary. Iron had long been in partial use. The iron industries were extending, new mines opened, new furnaces and rolling mills established. The demand for structural iron increasing. The I-beam was invented and recognized as the most economical shape for floor joist and girders. Iron, although classed as an incombustible material, is nevertheless, if unprotected, destroyed by the heat of a burning stock of goods. The early fireproof buildings were floored with brick or concrete arches between I-beams. These arches were heavy and left a ceiling not pleasing to the eye, beside the lower flanges of the beams, and the columns were not protected. Progress was slow and but few fireproof buildings were erected in this country.

The hollow terra-cotta fireclay arch was invented, strong, light and of less cost than the old methods, and more effective. With this material it was easy to entirely cover the I-beam and form a flat ceiling that only required plastering, and to protect the columns; for it could be readily molded into the shapes most convenient for each purpose. We then entered upon an age of iron. All important public, and some private buildings, were of masonry or of iron backed with masonry. The interior columns, girders and beams of iron; the floors and partitions of hollow fireclay tile. One step more and in the outside walls iron columns inclosed in masonry took the place of the old masonry pier. This was first introduced extensively in the Home Insurance building in this city.

Steel had been long known but was too costly for building purposes. The Bessemer process had changed the railway rails from iron to steel, and Carnegie rolled some I-beams of steel and sent them with his compliments to be used in the Home Insurance building, instead of iron. This only about four years ago. The advantages of steel were soon recognized. The tensile strength of good, mild steel as compared with iron is twenty to twenty-five per cent more, or 60,000 to 64,000 pounds per square inch for steel and 48,000 to 50,000 for iron. Hence steel construction is lighter than iron and as the price per pound is the same there is a large saving in cost. Hence as a natural consequence steel rapidly took the place of iron and we entered upon an age of steel, our important buildings becoming literally and completely a steel construction fireproofed. The masonry reduced to the very minimum, not only carrying no weight, but being itself carried by lintels of steel from column to column over each window, as in the Home Insurance building, the Tacoma and the Leiter buildings, the Rand-McNally building, etc. (all in Chicago). The steel is only covered by thin terra-cotta, brick or stone. As an immediate consequence of this method of construction our Chicago buildings rose rapidly from six stories to sixteen, for the lightness of this construction enabled the architects to find room on Chicago's soft compressible clay for their footings. Steel has now become such an all-important factor in the construction, not only of all our important buildings, but also of all the navies of the world, of the railways, their rails, bridges, stations, rolling stock, etc., that we may fairly claim that steel is today an important element of our civilization, rendering possible and profitable what would otherwise be quite impracticable, so that I hope to be able to make interesting a brief account of the manufacture of constructional steel, such as has so suddenly burst from an unknown industry but a few years ago into such universal use today. The use of steel in building construction is increasing faster even than the means of manufacture. Today in Chicago it is impossible to obtain steel beams as rapidly as they are wanted and many of our buildings are badly delayed. As well as one can judge, the demands for the coming year will be beyond the present output of the mills. The Illinois Steel Company are building a great plant and have again commenced rolling steel beams at one of their mills, and soon Chicago will become one of the centers of steel, which will greatly facilitate our building operations. Carnegie, I am informed, is now preparing to run continually night and day, that he may keep up with the demands and fill his orders.

Structural steel is a special kind that experience shows to be best adapted to constructural purposes. It contains a little more carbon than iron and is known as mild steel. Speaking broadly, wrought iron contains 0.00 to 0.10 carbon; structural steel contains 0.12 to 0.15, about ⅛ of 1 per cent; high grade steel for tools, machinery, etc., contains 0.18 to 1.15; pig iron contains 2 per cent to 5 per cent, or even 6 per cent. Most of the structural steel in use is made by either the Bessemer process or the Open-hearth process. Rails, and beams in large part are made by the Bessemer process, while boiler and armour plates are made by the Open-hearth process, though some beam mills use the Open-hearth process, which is becoming cheaper by the ability to use cheaper pig. In all cases the first process in the manufacture is to reduce the ore to pig iron. The ores of the Illinois Steel Company come from the Lake Superior region. Those used in Pittsburgh from everywhere, Spain, Elba, the coast of Africa, etc. The ores are reduced in the blast furnace, of which there are many forms, although they vary but little in all the essential particulars.

(Here the speaker gave a description of the modern blast furnace, the Bessemer converter and the Open-hearth furnace, illustrated by large diagrams, and the process of manufacture from the ore to structural steel, such as is commonly used in building construction.)

It is necessary that the architect should be certain that he obtains the quality of steel upon which his calculations are based.

His specifications are substantially as follows in the essential particulars:

"From each blow of the converter, or from each charge of the furnace, an ingot shall be cast and rolled into test bars, which shall be pulled and the test sheets sent to the architect with each shipment. The tests shall be as follows: The elastic limit not less than 3,200 pounds per square inch. The elongation to be not less than 22 per cent. For all plates, angles and Z bars there shall be in addition to the above a quench test. The bar to be heated to cherry red and plunged into water at 82° Fahrenheit, and then bent cold over a bar of diameter equal to the thickness of the bar to be tested. This bending to be made without any signs of fracture. After the foregoing tests have been made and the metal has been accepted, the rolled material shall be examined for surface defects. All beams, plates, angles, Z shapes or other material shall be free from any injurious surface defects and shall be straight and true, and free from any twisting. All riveted work shall be put together with hot steel rivets of superior quality, such as are used for steam boiler work. They shall bend cold on themselves without showing any signs of cracks. All riveted work shall be true and straight and free from any injurious defects. All columns shall be straight and free from any twist. The seats or bearings of all columns shall be true and square so that the column shall stand plumb with an even bearing over the entire surface of the connection. Should it be necessary to put in any filling, said filling shall be of plate steel and shaped to fit exactly, and to bring the column plumb and to the proper level. No material that does not fill these specifications will be accepted.

Structural steel is by no means confined to beams: it includes also plates, angles, Z's and other shapes used for making steel columns, plate girders, etc. The steel column is coming into general use in our new buildings. Only a year ago it was an open question which should be used, the cast-iron columns or the rolled and riveted steel column. Our specifications for cast-iron columns demanded that from each heat of the cupola or melting furnace two or three bars should be cast 1 inch square and 5 feet long and tested by placing on firm supports 4 feet 6 inches apart and loading in the center with 470 pounds without breaking. This guarantees the metal to be of sufficient strength so that, as far as metal alone is concerned, cast-iron can be obtained of a thoroughly satisfactory quality. The same is true of the rolled steel. A heavy cast-iron column made with all possible care and skill is liable to hidden defects. Our specifications demand that the column shall be drilled twice at right angles, so that the inspector can measure the thickness in two places, from which he can judge of the balance, but it must often be the case that other parts are deficient on one or more sides. Equally dangerous are spongy or honeycomb like places caused by the gases blowing through the metal, and also what are called cold shuts, formed by the metal cooling so much as it runs through the mold as not to thoroughly unite, when from two sides it comes in contact. Sometimes defects from either of these causes are readily discovered, at others they are only detected after the most thorough examination an inspector can make by a careful scrutiny and by tapping all over the column with a light hammer, listening for any change in the sound. Sometimes the sound enables the expert to detect a very serious defect, that otherwise would entirely have escaped his notice. As the cast-iron column can only be examined on the outside, one can never be sure of a perfect column; for this reason architects only load a cast-iron column with one-eighth of the breaking load, supposing the column to be perfect. The rolled steel column is made up of pieces that are all inspected for metal and on all sides for surface defects before the column is built up, and then after the column is finished the workmanship is again inspected, so that one can be reasonably sure that a steel column is perfect. Hence the architect feels safe in loading the steel column with one-fourth the breaking load. Hence steel columns weigh much less—only about one-half the weight of cast-iron columns. This reduction in weight is an important item in the construction of tall buildings on our compressible soil, which can only be safely loaded with one and one-half tons per square foot on the foundations, for Chicago soil is soft compressible clay of some sixty or more feet in depth and any greater load per square foot than one and one-half tons causes too great settlement.

It is a very difficult problem to adjust the foundations to the ground so that the weights shall be uniformly distributed, for they practically cover all the ground under our tall buildings and spread out as far as practicable under the sidewalks and into the alley. Hence it is easily understood why it is that the steel column is so generally taking precedence. From this day on it will be the rule, and the cast-iron column will only be used in unimportant structures. In conclusion, the question naturally arises, what is the near future of steel? It is probably greater than anyone would have the courage to foretell. Inventions that permit the use of cheap, easily mined

ores; improvements that increase the production of a given plant; the inventions of labor-saving appliances for every branch of the work; the concentration into immense plants carefully planned by skillful engineers, running continually 24 hours a day, and 365 days a year, increasing the output and reducing the expense of production, and with all this, a steady improvement in the quality of the metal, will make steel cheaper and more and more popular. Its use will be extended in every direction. Before long every hotel, apartment house, theater and schoolhouse will be fireproof. Architects have already commenced to design fireproof dwellings, and ere long they will be the rule rather than the exception. Iron railroad ties were used in India years ago, because of the perishable nature of wood in the tropics. We can certainly look forward to steel railroad ties in the near future and to its use for many purposes not thought of today.

The interest that the world is taking in the manufacture of steel is well shown by the recent visit of a large delegation of European metallurgists, who were recently entertained in Chicago. They paid many a compliment to the American manufacturer for his admirable system and the many labor-saving appliances, and his methods for increasing production; and they left with their note-books well filled with useful hints.

In buildings of all classes steel will supersede all other material for the construction, but steel alone is insufficient; it must be fire-proof and there must be external walls. For the floors and partitions we have made some recent improvements, principally in making better and lighter material. Something new is required for the exterior. Light, durable, fireproof, non-absorbent, easily cleaned by the rain and pleasing in appearance, and susceptible of artistic effects. Such a material is clay. We have long used brick and terra-cotta; they were known to the ancients; brick is too solid, that is, too heavy, and becomes white with alkaline salts and absorbs dirt. Terra-cotta is mostly hand pressed and is too costly. We want a terra-cotta made rapidly by machinery at low price, its surface dull glazed, impervious to moisture, hard baked, uniform in quality and color, using hand work for the few carved pieces. There is a great plant now nearly ready to commence operations at the Stickney tract in the southwest part of the city, out on the prairie, that promises to give us just what we require for the cheaper portions. They already have two kilns each, 672 feet long, of the tunnel pattern. They are very ingenious. The material to be burned is piled on steel cars, fire-proofed. The car enters the kiln tunnel on a railroad track and when it leaves the tunnel at the other end the bricks or terra-cotta are burned and cooled and are ready for shipment.

With cheap steel of a very superior quality and a light, dull glazed terra-cotta and a strong, light fireproofing, we are ready to build as never before—light, strong and at a reasonable price, within reach of every one that can afford to build at all; and we enter upon a new age—an age of steel and burnt clay.

## Notes from French Exchanges.*

INDUSTRIAL ARTS IN FRANCE, ITALY AND BELGIUM.

THE French National Society of Sciences and the Industrial Arts held its annual exposition lately at Paris; but, according to *La Semaine des Constructeurs*, the finest portion of the exhibit does not seem to have been a startling success. In the way of stained glass, one exhibitor displayed the transparent decorations of the bed-room of Sara Bernhardt, while another showed some ornamental work on a telephone closet! As for artistic manifestation in this temple of industry, there were only the *concerté*, which were extremely remarkable for their execution. As for the scientific manifestations, there was an enormous number of small pavilions under the shadows of the galleries, where charming young women with gracious smiles dispensed various drinks. Most people, possibly, are ignorant that gastronomy constitutes one branch of industrial art, but such appears to be the case. Instruction in the industrial arts has for several years made immense progress in France, and the numerous designs sent to this exhibition by the pupils of the city schools prove this most abundantly. Their work and the wise manner it is directed merits the highest praise. Especially the exhibits from the girls' schools give proof of the finest taste. All these may be judged by comparison with the displays of the national or governmental schools protected by the state, since these institutions also exhibit the work of their most illustrious scholars. Underneath splendid coats-of-arms upon which are inscribed in letters of gold such glorious mottoes as "Honor and Country," "Valor and Discipline," etc., one sees embroideries for the uniforms of sub-prefects and generals, accompanied by some classical charcoal drawings and monotonous water colors. All these, alas! grow decidedly pale beside some of the modest essays, so full of natural taste, made by the little working girls of the Paris faubourgs. If the French section is not gratifying to a native fortunately the foreigners furnish some *motifs* that may be profitable for them to study. Italy in the fifteenth century, at the time of Michael Angelo and Raphael, was incontestably the instructor in architecture and the fine arts. Later, Flanders, in the times of Rubens and Van Dyck, gave masters to France, and now, if care is not taken, Rome and Florence, Antwerp and Brussels will again reconquer the place that France pretends to hold today at the head of European nations.

In an article of some length, Monsieur Raison begs the French not to be too assured of their present position, and he called their attention to certain facts brought out by this display. "There are in the Italian exhibit pieces of furniture in an absolutely new style, which equal in execution the finest that can be produced by the best houses in France. As far as chairs of Louis XV and tables and beds of Louis XVI are concerned, we are greatly superior to the Italians and Flemish. In this department the foreign workmen are content to imitate us, and they do it badly. The spirit of the eighteenth century in France was so strongly marked with a French note that it will not stand translation, and when turned into an Italian or Belgian patois it loses all its delicacy.

"But among the Venetian and Milanese workmen there are some, however, who are doing a modern Italian style, and in this line they are greatly distancing our own workmen, some of their pieces being veritable marvels of beauty. In the same manner, the Belgians in their nineteenth century renaissance are far ahead of us. In the industrial arts our neighbors at the north and south are advancing with prodigious strides. They have no schools supported by the state and following official traditions, and possibly here lies the great secret of their success. Let us profit by the lesson they are giving; and honor calls us to prevent the nineteenth century renaissance, so well commenced by us, from (as in the sixteenth century) borrowing its principal glory from the Florentines and Flemish."

*Translated by W. A. Otis for THE INLAND ARCHITECT.

CONDEMNATION OF PRIVATE PROPERTY FOR PUBLIC IMPROVEMENTS.

The laws of the little town of Auvilar in southern France, written in 1270 in the old *langue-d'oc*, speak of condemnation proceedings as in occasional use in the cities of the south of France from the remotest antiquity. *La Semaine des Constructeurs*, September 20, 1890, says that in Paris the first record of such proceedings is an act of parliament, dated May 30, 1572, enabling the city officials to acquire a certain piece of property. In 1584 an act was passed by the parliament ordering a private individual to sell his garden to the church of St. Martin, to be used for increasing the size of the cemetery belonging to that church, and again, in 1612, a strip of land was by special act condemned in order that a street might be increased three feet in width.

THE INTERIOR DECORATIONS OF THE MUSEUM OF RELIGIONS (GUIMET MUSEUM), AT PARIS.

The architect, M. Terrier, in charge of this work, has inaugurated a new method of decoration, which has been thought out with so much care that it merits most careful study.

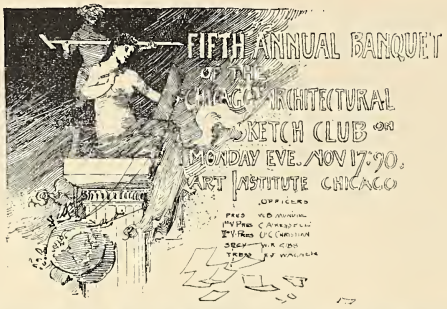
According to *La Semaine des Constructeurs*, of September 27, 1890, it is only within a few years that the authorities decided to cover the dreary and monotonous walls of the sculpture galleries of the Louvre with a coat of color; and yet, statues only show their full worth against a background that throws them out. Already, in the Assyrian collection, the winged bulls of Korsabad, and the bas-reliefs of the Temple of Nimrod, are brought out by a background of red ochre. In a similar manner the rooms of the Renaissance and the Middle Ages have also been painted, and there is now talk of covering the walls of the staircases with dark colored marbles so that the eye may become gradually prepared to contemplate the treasures accumulated in those rooms. The Guimet Museum, destined for religious subjects, has been decorated with this idea in view, in a most masterly and scientific manner. Upon entering the building a circular vestibule, ornamented with columns, initiates one into that which is about to be studied. The tints which decorate the walls of this vestibule, and the ornaments which cover them, are sober and chaste. Mounting several steps, the long galleries open before one, and prepared by this introduction, the entrance is full of charms. Nothing shocks; nothing distracts; but all goes toward giving a subdued and religious impression. The first floor is devoted to Buddhism, Brahmanism, and the religions of India, China and Japan. Above, on one side, is Egypt, and on the other Rome, Greece and ancient Gaul. In the Oriental portion, the walls are covered with designs which are simplified translations of the decorations of vases that one sees distributed here and there; all permitting one to enjoy, with a feeling of perfect unity and rest, the majestic grandeur of the gilded statues seated upon the lotus or the bas-reliefs, and other objects in the cases made only of glass and the smallest strips of black wood.

In the Egyptian department one sees the works of the inhabitants of the banks of the Nile; funeral processions and prayers of the devotees of Ammon, Osiris and Phta are on every side, and form, as it were, a commentary upon the figurines, altars and offerings that have been grouped with great intelligence. In the rooms containing the Gallo-Roman and Pompeian collections the decoration again changes, but always calm, always restful and always in harmony with what the room contains, so that one is almost forced to comprehend the spirit of those who adored and made offerings.

When one comes to leave it is with a mind filled with pleasure, having the feeling that a great deal has been learned in a short time; and one only wishes that the directors and curators of other museums, who now display their collections like the common goods of a country-store, would go and learn at the Guimet Museum the art of exhibiting a collection.

THE *Century* magazine is running a fast press day and night in order to print the first installment of the delayed "Talleyrand Memoirs" in the January number. This same magazine was the first to print, before its appearance in France, the life and literary remains of the great French artist, Jean François Millet, and now the *Century* is to bring to light, before they appear in any other country, the long-hidden memoirs of the most famous of French diplomatists. This first article will be preceded by what is said to be a brilliant pen-portrait of Talleyrand, by Minister Whitelaw Reid, who has made the selections from the most interesting chapters of the first volume.

## Chicago Architectural Sketch Club.




THE above title, which embellished the front of an elaborate and artistic *menu*, will long serve to remind the members of the C. A. S. C. of what Francis Wilson would call "great gobs of joy," which characterized the annual banquet of the club on November 17. The club rooms were profusely decorated with plants, flowers, festoons of evergreen and smilax. The best watercolors of the best artists in the club adorned three walls of the assembly room, while on the fourth wall were arranged the twenty-five drawings of the Clark medal competition, the prize drawings being framed in evergreen.

Covers were laid for seventy; the tables taxed the capacity of the hall to the utmost and every seat was filled. There were gathered about the board draftsmen who are winning national reputations, and many friends who have already achieved world-wide distinction in their art, and are still willing to lend their presence and counsel wherever it will give pleasure to those who emulate their successes, while they share the good fellowship that comes from the association with genius that knows no age.

William Brice Mundie, president of the club and winner of the Clark gold medal, occupied a central position at the head of the table. On his right those veteran architects and engineers, William LeBaron Jenney and James R. Willett, were young fellows again for the evening, the swamp bridge building and fort planning during the war as chiefs of engineers on Sherman's staff or the vicissitudes of architectural practice since having only touched their hair with gray, their hearts being as green as in their student days, of which these gatherings remind them. Lorado Taft, the sculptor, was there, and Dankmar Adler, the architect of the Auditorium, another architect with a war experience as captain of artillery. Other guests there were to lend dignity and pleasure to the occasion, while the absent Mr. Root was represented by a glorious bowl of punch, sent with his compliments, and regrets that important business prevented attendance. After the elaborate *menu* had been discussed, the club was toasted by Lorado Taft—responded to by President-elect Williamson in behalf of the club, after which Mr. Adler, as chairman of the committee on the Clark medal competition, read the report of the committee and awarded the prizes, Mr. Gibb, secretary of the club, accepting the medals for those not present. These consisted of the gold and silver medals of last year's competition and the gold, silver and three bronze medals of the present or second competition just closed. These latter being as follows (the full report of the committee was published in November intermediate number, page 65):

Second competition, 1890, gold medal, W. B. Mundie, of Chicago; silver medal, Arthur Heun, of Chicago; first bronze medal, J. C. Green, of Denver; second bronze medal, F. R. Hursh, of New York; third bronzed medal, C. F. Bragdon, of Rochester, New York. This was the announcement made by Mr. Adler, and it was greeted with cheers, as, besides the two home members heading the list, Mr. Hursh is also a member of the club, and to take three out of five medals out of a national competition was no small cause for gratification and pride.

Mr. Adler spoke of Mr. Clark as one whom he had known for many years—a Scotchman of the old school, a manufacturer of structural iron, always conscientious and careful in following out the lines of the draftsman. Now wealthy, he was true to the desire he always had manifested to improve the character of design, and had founded this medal competition.

After the medals had been disposed of, the recipients thanking the committee in brief speeches, Mr. Jenney, in response to the toast, "The Draftsman," said:

Who are the draftsmen? Those who draw well everything and anything. They draw their salary, and when dressed in their best of a pleasant Saturday afternoon, walking down State street, they have been known to draw the girls' eyes.

In the offices the popular idea of a draftsman is the fellow who receives small pay and does all the work. He is the one who should be credited with all that is fine in the thousand and one fine buildings; all that is bad being due to the interference of that old fogy, the architect.

Well, he is not so far wrong, but it is after all necessary to have the strong arm of the old fogy to hold him a little in check, to keep him down to the practical, to prevent him from making windows that no one can look out from, and chimneys that must smoke or chambers wherein there is neither place for bed nor bureau, and to force him to allow room for a stairway rather than a step ladder, and to add a few closets, etc. That is to say, to curb the draftsman's enthusiasm for the esthetic just long enough to remind him that the owner and his family propose to live in the house, and that the necessities and even the comforts of life are really essential and must be provided for. Although the exterior may excite the admiration of the passer-by, and the owner may be often asked, Who was the architect?—still the house can scarcely be considered a success unless the plan is a good one that fills the requirements.

It is certainly not pleasant to an architect to learn that his client, after living in his house a few months, is fond of making the facetious remark "that he envies his neighbor across the way, because this neighbor can enjoy so much better than he all that is really fine of his house—the exterior."

Now, there are all sorts of draftsmen. First, there is the educated, esthetic draftsman—the enthusiastic, industrious, observing draftsman. The Vitruvius-Palladio-Violet-le-Duc draftsman. The fellow who, when not at work, is studying the works of others. He goes out into the country pleasant Sundays to sketch in color from nature. Nothing worth the seeing or knowing escapes him. There are none too many of this sort. You all know them—they take most of the medals and prizes.

Then there is the symmetrical draftsman, his hair parted in the middle. He curls his mustache the same at each end. He wears a double eye-glass without rim or handle, that complete symmetry may be preserved. He joins no foot-ball club, for he might get his nose knocked to one side. He carries neither cane nor umbrella, for they destroy the symmetry. He wears a mackintosh.

He designed a dwelling for a friend of mine, well out in the suburbs. Now, his client was a man after his own heart—one who loved symmetry. The house and the grounds were completed; the owner was delighted. Now, this owner had a friend who had just built one of these modern, classico-colono renewsance sort of houses, with a little hodge-podge added, the abomination of our symmetrical draftsman, whose client hitched up his buggy and, calling for his friend, induced him to drive out with him to see his symmetrical house. They reached the front of the lot; a central gateway opened onto the drive, straight up to the center of the house, which was placed exactly in the center of the lot. The owner expatiated upon the beauties of his house: See, a central doorway in front, a central axis in each elevation; everything exactly symmetrical, all designed and settled before any plan of interior was made.

"You have no idea," said the owner, "what a labor it was to make a plan for this house and preserve the symmetry, and how we were forced to put the pantries and bathrooms and closets just where we did not want them."

Our owner and his friend walked around the house, admiring the symmetry of each façade until they returned to the front, where the friend remarked, "Why, that boy looking out of the left-hand second story window was there when we arrived an hour ago." "Yes, that is my son; he was bad this morning, so I put him at that window for punishment." "Why, there is another boy at the corresponding window on the right; have you two sons, and both bad the same morning?" "Oh, no; that is a little bootblack that I hired and put there to preserve the symmetry." (Do not think I am lying; this is a true story.) So much for the symmetrical draftsman.




Now, there is the dude draftsman; he sticks a glass in one eye and carries a high cane, the cross head behind, that looks like a big T square. He is so rare and of such small account when found that we will let him pass.

Then there is the conceited draftsman. He reminds one of the Jack of Clubs. He is not appreciated in the office where he works. To know him and his worth, one must hear him talk when he is out of an evening with the draftsmen from other offices. Then you know for the first time why it is that the architect who was so fortunate as to secure his services has made so much reputation.

Now, there is the hard-working, plodding, economical draftsman. He picks up all the short bits of pencils, borrows tools, etc. He lacks brilliancy and originality, but, after all, is often a very reliable, useful man of all work.

Then there is the whistling, singing draftsman, who stretches himself flat on his belly on the table and either whistles or sings all day long. Now he is a real jolly, good natured fellow and may be

withal a very useful assistant, but somehow or other one gets tired of hearing "Annie Rooney" whistled and sung, sung and whistled, in key and out of key, in short snatches, hour after hour, week in and week out, only varied by an occasional yell of "dry up over there" and allusions to little brown nuts or to long-tailed little animals.

Then there are the draftsmen collectively. A jolly set of mighty good fellows they are, who well know how to give a banquet and to entertain their guests and each other right royally. Long life to them. Will the guests join me? Here is to their health, everyone of them.

Many other speeches were made, songs were sung, music of piano and of violin made the perfumed air vibrate with sweet sounds, and at four o'clock the lights were turned out, and the fifth annual banquet of the C. A. S. C. closed a complete success.

## Mistakes of Employes.*

BY CYRUS KEHR, OF CHICAGO.

WHAT I shall say will be in reference only to the mistakes of employés in this country; and the mistakes which I shall mention are not made by all the employés of this country. By way of introduction, it may be noted that employés are persons who work for others and receive pay therefor. It is to be borne in mind that our people are not all either employés or employers. Many are neither. The festive tramp, the burglar, and the swindler live without hiring or being hired. So do many small manufacturers and many tillers of the soil. So do many business people. It is also to be observed that the employés of this country are not all poor and the employers are not all rich.

In common with the rest of mankind, employés imagine that they have less advantage and more burdens than other people have. Sharing in this weakness, the employé is by nature led to feel that the man for whom he works has privileges and pleasures and freedom from vexations to a greater degree than he may ever hope to attain, while the fact may be that the employé has little responsibility and worry or hardship in comparison with what the employer must face.

Unconsciously taking this view, the employé is prepared to give ear and attention to anything in the nature of a murmuring regarding his own lot or any arraignment of the methods of his employer.

Some employés make the mistake of asking their brother man to divide his worldly goods with them while they are not willing to divide with him. Who ever knew of an advocate of equal division of property who had any property and was willing to divide it with others?

Another mistake made by employés is their inclination to cling to large cities. Thousands stay in large cities where they receive small salaries, live in poor quarters, and breathe the poisoned atmosphere. The large city has a peculiar fascination for these people, and many can not be induced to leave although they live in sections of the city in which poverty and discomfort prevail.

There are manufacturers who would like to move their establishments from Chicago to country towns, but can not do so because they could not there secure the necessary employés. Manufacturers have told me that if they should move their plants to a country town and offer to take their empoyés along and pay them increased wages and at the same time give them an opportunity to live more comfortably and more cheaply, they could get but a few to go. They will not leave the hum of the multitude.

Many employés make the mistake of not exerting themselves to attain better qualifications in the line of their occupation. There is a great surplus of unskilled men. Let a vacancy in almost any occupation be announced, and there will be numerous applications by men who are totally unfit for the position. Frequently employers must try a large number of men for a position requiring only moderate skill before a satisfactory person is found. I have often known of employers who were looking for days and weeks for a suitable employé, while numerous men were seeking the place but could not be taken because they lacked the necessary skill. The employé should strive to acquire such skill as will make him indispensable to his employer. A man who is thoroughly skilled in any trade or calling, need seldom be idle. Instead of making this effort to thoroughly master their occupations, many stop when they have learned barely enough to place themselves on a pay-roll, and all they do thereafter in relation to the acquiring of skill in their line of occupation is to formulate and try to enforce rules calculated to bar others from learning and entering their calling. Only the other day there came to my notice the case of a young man who has barely learned the rudiments of an occupation which affords opportunity for almost unlimited expansion in skill, and he is content with the little he has learned and has joined a union whose chief rule requires all members to hinder others from learning and entering their occupation. They lack the ambition to ascend to a higher plane and have arranged themselves in picket line for the purpose of preventing others from doing so.

Allied to the foregoing is the mistake which some employés make in not giving their support to the public schools. The schools are supported by property taxes and he who has the most property contributes most to the school funds. The poor man pays least, but it is the public school that places his son on an equal footing with the son of the rich man. The moneyless youth who is properly educated and disciplined is better equipped for life than is the deficiently-trained wealthy youth. In this case, "The fool and his money are soon parted," but the poor youth has his education and also knows the value of what he earns and knows how to save it. The poor man makes a grievous mistake when he says or does aught against the public schools.

The employé often makes the mistake of not conceding to the employer a margin for the risks necessarily assumed by the latter in his business. The employé who receives two dollars a day knows exactly the amount of his income, but few employers have a constant income. The manufacturer, for example, may during the course of a year realize a considerable net sum, or the year's business may result in a loss. To meet the latter, he must have a capital, and to compensate for losses he must reckon for a margin of profit larger than would be required were the losses at the minimum from year to year. Many manufacturers are wrecked because they do not make proper allowance for stagnation in sales and extra losses and expenses. I know a carpenter who might be a contractor and employer of a large number of men, but he prefers to work for the definite and constant wages which his skill commands and invest the surplus of earnings and let others assume the business risks.

A mistake is also made in assuming that the people of this country are permanently divided into two classes, the exalted or rich, and the humble or poor, separated by an impassable barrier. This country is not the home of caste. The poverty stricken are comparatively few. The restless are few, but seem many because of their constant and loud talking. The many thousands who work soberly and steadily and gradually acquire comforts, if not a competency, are out of notice because they make so little tumult. Instead of being confined by caste, the poorest may become the richest; those of humble station may rise to the places of greatest honor; the rail-splitter, the tanner or the canal boy may here become the greatest among us and greater than a king.

A most serious and criminal mistake made by employés is in undertaking to control the actions of their fellows. This is a direct and dangerous attack upon the liberty which our government seeks to secure to all. The people of the thirteen colonies announced and enforced recognition of the right of self-government. They shattered one of the strongest bonds of tyranny. But, while they freed themselves from monarchy, they left human slavery undisturbed. While they established the principle that a man need not do the bidding of a king, they did not deal with the holding of one man by another as a chattel and a beast of toil and burden.

During many years the country was concerned in the effort to solve this feature of the problem of liberty. After trying a large number of the expedients and attempting to establish all manner of unsatisfactory and untenable doctrines relating to this subject, this country, by an effort that shook the world, announced, that *one man must not be allowed to compel another to work for him.*

But full liberty is to be attained step by step. After the lapse of a quarter of a century, we find that the employés of this country, they who should be foremost in their zeal to promote liberty, have made the mistake of developing a violation of liberty which, in magnitude and seriousness, rivals the slavery of our former years. Indeed, this later violation of liberty is the counterpart of human slavery. Slavery disappeared from our land when we established that, "*One man must not be allowed to compel another to work for him.*" The counterpart of this is, "*A man must be allowed to work, if he have a task.*" Could anything be more simple and self-evident? And yet this principle is frequently violated.

If your neighbor undertakes to paint or mend his house or build him a stable with his own hands, who has a right to club or stone him? Yet this has been done in the proudest of our forty-four states.

If you bargain with your neighbor to lay a wall, or build, or repair a house, who has a right to way-lay or terrorize him? The principle is the same whether your are building one or a hundred houses.

If you have bargained with a man to cut for him four cords of wood at a price that is satisfactory to you and to him, and you are engaged at the work in order to earn bread for your wife and children, who has a right to force you from your work? The principle is the same if there are four hundred cords of wood.

If you bargain with the owner to operate a machine on certain terms, who has a right to stand at the door of the shop and murder you? Is the principle any different if there are a hundred machines and a hundred men?

What right have a band of men who are dissatisfied with their employments to drive a stranger from a porch he is building to his own house, and then tear the porch down?

What right have a group of men who have left their own work to murder a peaceable old man building his own house?

Nine years ago I met upon a street in Chicago a man who was covered with blood from head to foot. He was dazed and hardly able to walk. He said he had been working on a dock and suddenly a number of men came and stoned and clubbed him; that he did not know he was doing anything wrong; that he had the chance to work and wanted to earn the money.

No sect or class of people worked more earnestly for the abolition of human slavery than did the Quakers. There are now living three Quaker sons who have suffered outrages as painful, as protracted, and as serious as any portrayed in Uncle Tom's Cabin. They were born in Ohio, are well educated, and are skillful printers. They have been at Columbus, Indianapolis, Cincinnati and elsewhere, filling responsible positions, but everywhere persecuted and threatened by the union, whom they, from principle, refuse to join. At various times they have been assaulted, seriously injured and each has now physical defects and ailments resulting from such assaults. Nor is this wrong limited to the sons. The gentle mother is in constant fear that these persecutions may end in murder.

"But," some one may say, "all this is done in effort to improve the condition of the laboring man." May one employé be allowed to

*Paper read before a semi-social gathering November 28, 1890, printed in these pages because it is the most clear, concise and practical exposition of the labor problem that has come under our observation, giving the status of the employé its true value, and as universal in its application as the golden rule.

improve his condition by clubbing and murdering another, and denying him a right as sacred as any this government undertakes to secure to him? "But," says the dissatisfied employé, "I am oppressed." That may be, but you must not take the wrong way to relieve yourself. You must not attempt to improve your own condition by wronging some other person. As you would not be made to work against your will, so do not prevent another from working if he chooses to work.

## Death of Two Veteran Decorators.

WHEN white enamel paint, with a touch of gold upon the trim and white plaster walls, marked the highest idea of decorative art in residences, there were two painters in Chicago who excelled in the class of decoration then in vogue. As the use of color, both on the exterior and interior, became general, the firms of P. M. Almini and J. B. Sullivan & Bro. became known as leaders in this class of work. We are called upon to record the death of P. M. Almini and of M. J. Sullivan, the junior member of the firm of J. B. Sullivan & Bro.

PETER M. ALMINI.

Peter M. Almini died at the Virginia Hotel, Chicago, October 16 aged sixty-five years. He was born in the province of Smoland, Sweden, March 21, 1825. According to facts compiled by J. G. McCarthy, of Chicago, his boyhood was spent upon his father's farm, and his education only such as fell to the majority of farmers' sons in his immediate neighborhood. His native intelligence, coupled with the care and attention of his good mother—to whose care his younger years were assigned, his father dying while he was a mere youth—more than made up for the lack of educational opportunities afforded in his native land at that time, and made him ambitious to fit himself for the commanding position he was destined to occupy in the decorative world. Leaving home at the age of fourteen, he became apprenticed to a painter in the town of Ekesjo, with whom he spent the succeeding five years; at the close of his apprenticeship removing to Norrkoping, and subsequently to Stockholm, where for six years he labored and perfected himself in his chosen calling, during this time spending two years upon the decoration of the palace of the king. From Sweden he went to Russia, but finding the conditions there illy suited to his ardent love for liberty and enlightenment, he departed for this country, landing in New York in the year 1852. Within a year Mr. Almini came to Chicago, and for two years was engaged with several firms then carrying on a painting and decorating business, and in 1855 formed a partnership with Mr. Otto Jevne. His history from that time is well known to the older architects and builders of Chicago; two disastrous fires and a consequent loss of property being borne as cheerfully as were the physical ailments of his later years, a quality that made him many steadfast friends. Not alone in his line of business, but throughout the country, he was known and respected by those who had come in contact with him, and were charmed by his genial and kindly disposition. No man stood higher in this community in his calling, or as a citizen, with all that term implies, and the history of decorative art in the West cannot be written without his name occupying a commanding position in its annals. He occupied the office of treasurer of the National Association of Painters, which of itself shows how his reputation for strict business methods and sterling integrity was broad as the country of his adoption. He was buried with Masonic honors from the preceptory of the Scottish Rite at Graceland cemetery.

MICHAEL J. SULLIVAN.

Among the most active members not alone of the Chicago Master Painters' Association, but the Builders' and Traders' Exchange, Michael J. Sullivan was numbered. Belonging to a firm that for thirty years had been noted for fidelity to contract and enterprising in business methods, his sudden death was a shock such as seldom comes to the business world. His business life had never made him selfish, his friends were as many as his acquaintances and these were numberless in every city in the country. At the last convention of the National Association of Builders, to which he was a delegate, one of the most important measures, when championed by him, met with approval and its provisions will have a significant effect upon the building interests of the future. In reviewing his life, which was so particularly an active business one, his skill and taste as a decorator of a high order must not be forgotten, for his judgment and taste have beautified the churches and public buildings as well as the palaces of the people from the Atlantic to the Pacific. It might also be here recorded that it was the business foresight of his firm that saw in the blue-glass craze of twenty years ago a road to wealth that resulted in their securing a "corner" in that then supposed valuable medicinal agent. The esteem in which Mr. Sullivan was held was manifest by the action of the Builders' and Traders' Exchange. A special meeting having been called, the following resolution presented by Mr. Prussing was adopted as the sentiment of the exchange:

> With sorrow and regret we have heard of the sudden death of our friend, Michael J. Sullivan. We feel that a good man, an upright citizen, a true friend and a worthy member of the Builders' and Traders' Exchange has left us. He was kind and generous, alive to every advancement and progress, of sterling character and unquestioned integrity, and his reputation extended broadly over the land. He was liked by all he met, and made friends of all who were privileged to know him well. We feel his loss deeply and mourn with the bereaved.

The secretary was instructed to place the resolution on record, give it to the press for publication, and deliver to the family of the deceased a copy thereof suitably engrossed under seal of the exchange and countersigned by its officers, and the following were appointed as pallbearers: George Tapper, D. V. Purington, H. J. Milligan, George C. Prussing, E. V. Johnson, E. F. Gobel, B. W. May, P. Lichtenstadt, F. C. Schoenthaler, J. G. McCarthy, W. A. Wells, A. E. Wells, M. Benner, C. W. Gindele, F. S. Wright, William Grace, E. A. Thomas, James John, A. J. Weckler, W. P. Ketcham, J. R. Wilson, E. Koch, C. L. Willoughby, Adolph Henrotin. The funeral which followed was one of the most imposing ever given to a private citizen in Chicago. Almost the entire membership of the Builders' Exchange and of the Master Painters' Association attended in a body, and solemn high mass was celebrated. The departure from the church was imposing. The honorary pallbearers from the exchange, forming a guard of honor, lined the passage to the hearse, then the priests in their robes of office issued, and the casket loaded with flowers was carried reverently between the lines. The Master Painters' Association had sent a floral piece which occupied an open barouche. It was an urn five feet in hight, composed of ivy leaves, around which was twined a climbing rose vine. This rested upon a base of white immortelles, and upon which also rested a painter's pallet with the colors and brushes in different flowers. Above the flowers with which the urn overflowed rested a dove, the entire conception being one of the most artistic and appropriate displays of the painter's and florist's art imaginable. Yet, with the immense crowd of mourners, the solemn requiem of the choir, the mass solemnized by the priests, the flowers and the attending delegations, there was nothing in the least ostentatious, for to the observer it only said, *here is a man who has done something for his kind, being laid to rest, and in these things his neighbors seek to find some expression for their great grief.* The sable drapings that have for a month darkened the windows of the Painters' Exchange may be removed, but the name of Michael J. Sullivan will live in the hearts of the many who called him friend.

## The Competition Code of Austrian Architects.

ACCORDING to the competition code recently adopted by the Austrian Association of Architects and Engineers, all architectural competitions are to be by public invitation and to embrace the following conditions:

1. *The owner, his rights and obligations.*—The public invitation to compete should give the name of the owner or promoter of the competition, to whom is conceded the right to a free choice of the design which may please him best. He may acquire the right to use the premiated design and of any others which he may be able to purchase from their authors, on condition that the preparation of the working drawings and the supervision of the building shall be directed by the author of the design adopted, or by some other party with the consent of the said author previously obtained. His compensation for drawings and supervision shall be regulated by the schedule of commissions adopted by this association (of Austrian architects and engineers). The owner is to defray all the expenses of the competition, and to pay all premiums offered within thirty days after the close of the competition. This agreement by the owner should be explicitly set forth in the first announcement of the competition.

2. *Judges.*—In the first announcement should also appear the names of the experts selected by the owner to direct the competition and to act as judges.

3. *Jury, how composed and how paid.*—The number of jurors should be odd, not less than three, and at least two-thirds of the jurors must be experts in architecture and construction (i.e. either architects or engineers), while all the rest must be *connoisseurs*, by which term is indicated those who while neither professional architects nor engineers are yet qualified by education, experience and culture to make a just selection from the designs to be submitted to them. International competitions require the presence of foreign experts on the jury. The remuneration of judges and jury to be as set forth by the official schedule of this association.

4. *Duties and rights of the jury.*—The jury will have the absolute right to award premiums, and the sole right to open the sealed envelopes containing the addresses of the successful competitors. They must formulate the programme of the competition, must honorably refrain from all participation in the competition, direct or indirect, and must act impartially and without favor or prejudice in any respect. They should also prepare

(*a*) Full minutes of their proceedings as a jury, including an account of all important differences of opinion expressed at their sessions,

(*b*) An itemized analysis of the various designs, which, by conforming with the conditions of the competition, are entitled to consideration on their merits, setting forth the advantages and disadvantages of each,

(*c*) A report upon the various plans, comparing their relative merits and demerits, and announcing the awards made by the jury. They should further state whether they recommend the execution of any of the designs without modification, and, if not, whether they favor the selection of any design for remodeling or advise a new competition. The minutes, the analysis, and the report are each to be signed by all the judges.

The following duties will also devolve upon the judges:

(*d*) To transmit to the successful competitors proper certificates to enable them to receive the premiums awarded,

(*e*) To publish in the technical press their itemized analysis and their final report, in full or in part, and to announce the result of the competition through the daily journals of the widest circulation.

(*f*) To arrange for a public exhibition of all the designs received, including also the programme of the competition, the minutes of the jury, and their itemized analysis and their report, to all which equal publicity shall be given.

5. *Programme.*—The programme must give the requirements and preferences of the owner and such local data as the judges may select. The utmost care must be taken to distinguish between requirements to be considered as *desirable* only and those which are *indispensable*.

6. *Drawings.*—In general only the simplest outline drawings should be called for (sketches), to be as few as may answer clearly to indicate the solution proposed for the problem. The announcement of the competition should prescribe the number and character of drawings wanted and to what scale (usually 1-200 for single buildings; 1-400 for groups).

7. *Estimate of cost.*— Where the cost is not a ruling consideration no estimate should be required in a competition. If otherwise, an approximate estimate should be called for and full directions given as to its mode and extent. In such cases the cost will be one of the considerations to be regarded by the jury. If, further, the limit of cost is obligatory, this question will have precedence over all others with the jury, and the programme must require each design to be accompanied with an itemized estimate of quantities and prices capable of ready verification.

8. *Specification.*—The announcement of the competition must require with each design a descriptive specification justifying the solution of the problem shown, giving any scientific demonstration necessary, and designating the materials and methods of execution intended.

9. *Motto.*—Each design to bear a motto or other means of identification, which shall also appear on the face of a sealed envelope containing the name and address of the author. The face of the envelope to give also an address for the return of non-premiated designs without opening the envelope.

10. *Limit of time.*—The announcement should designate the place and time for the delivery of the competing designs, and the mode of acknowledging their receipt. Designs arriving subsequently will not be considered unless it is shown that the delay was from no fault on the part of the sender.

## Association Notes.

ILLINOIS CHAPTER AMERICAN INSTITUTE OF ARCHITECTS.

The annual meeting of the Illinois Chapter of the American Institute of Architects was held at the association rooms November 12, President John Addison in the chair. About twenty members were present.

The resolution passed some months ago, suggesting the appointment of a committee to call upon the Columbian Exposition directory regarding a competition scheme for the world's fair buildings, was brought up and discussed.

Mr. Adler in abstract said that as the directors had not asked the opinion of the Chapter regarding the proper method for securing designs, it would be in extremely bad taste for the Chapter to solicit recognition. The matter upon this was dropped.

The reports of the year were presented, that of the treasurer showing a large surplus in that official's hands.

The following officers were elected for the ensuing year: President, S. V. Shipman; first vice-president, H. B. Hill; second vice-president, W. A. Otis; secretary, George Beaumont; treasurer, D. Adler.

The report of the manager of the exhibit of building materials showed a profit up to date.

CHICAGO ARCHITECTURAL SKETCH CLUB.

There have been several business meetings of the club since the annual meeting, at the last (on December 15) the partial completion of the syllabus for the year being announced. Although the dates have not been definitely fixed the exercises are arranged at present as follows:

SYLLABUS.

December 22.—W. A. Morse, a lantern exhibit.
January 12.—Club entertainment.
January 26.—William Kleinpell, paper on Dormers.
February 9.—W. Schlessinger, lantern exhibit of views of and about the castles of King Louis of Bavaria.
February 23.—W. H. Perkins, a paper on System.
March 9.—E. H. Hoeffner, paper on Fireproofing.
March 9.—Club entertainment.
March 23.—W. B. Mundie, Exterior and Interior Design.
April 6.—George Beaumont, Architectural Aspirations.
April 20.—Fritz Wagner, The Practical and Artistic Draftsman.
May 4.—Arthur Dawson, Sketches.
May 18.—R. C. McLean, What I Know About Draftsmen.
June 15.—Ernest Albert, Scenic Art.
June 29.—J. E. Youngberg, Architects up to Date.
August 10.—Club excursion and picnic.
September 7.—Club entertainment and social.
September 21.—C. A. Kessell, Character Studies.
October 5.—W. A. Morse, lantern exhibit.
October 19.—A. B. Pond, "One on Browning."
November 2.—Annual meeting.
November 16.—Annual banquet.

COMPETITIONS.

January 26.—Design for upright piano.
March 9.—Water color from photograph.
April 20.—Bridge and tollgate.
June 1.—Design to a given outline.
September 7.—Design and artistic rendering from the following quotation (to be selected).
November 2.—Menu card.

Through the year it is proposed to entertain the members with frequent informal meetings and socials, and in general the year promises to be a notable one with the club.

ST. LOUIS ARCHITECTURAL LEAGUE.

The annual meeting of the St. Louis Architectural League was held November 8 at the St. Louis Museum of Fine Arts. The following officers were elected for the ensuing year:

President, J. P. Annan; vice-president, G. M. Siemens; secretary, W. A. Hirsch; treasurer, J. L. Wees; executive committee, P. Bardell, C. R. Greene.

The club held an exhibit and social meeting on November 22 when they had the pleasure of entertaining among their guests, Hon. James McGrath, Professor Ives, Professor Brinkhurst, Dr. Green, Architects Furber and Ramsey, Mr. Holmes Smith and Mr. Stoddard, who inspected the excellent exhibit of drawings, among which were conspicuous the works of the well-known draftsmen, Harvey Ellis, Oscar Enders, Oliver C. Smith, Gustave Lendholdt, and some valuable contributions from several architects in this city and Eckel & Mann, of St. Joseph, Missouri. After inspecting the exhibit, in response to the calls of Vice President Siemens, who occupied the chair, the remainder of the evening was spent in listening to clever, instructive and witty speeches. Draftsman G. G. Will responded in behalf of the club, and after pleading the draftsman's cause in an able, though somewhat pathetic manner, to the edification and amusement of the company, introduced what appeared to be the most highly appreciated feature of the evening, namely, the refreshments provided for the occasion, of which all partook in a hearty manner, enjoying themselves thoroughly and going home happy.

CHICAGO CARPENTERS' AND BUILDERS' ASSOCIATION.

The regular meeting of the association, held December 11, was well attended, the special attraction being the opening of new quarters —and incidentally a tool chest and a keg of nails. This was done successfully, and the president was toasted by the members as heartily as he was "roasted" by some partisan newspapers during the strike.

The membership of the association has steadily increased, and through the capable management of the president and Secretary Berry the association was never in so flourishing a condition as at present and the members so much a unit in all questions of policy.

The principal business was a short discussion of a request received from the carpenters' union for the appointment of a committee to meet its Committee on Arbitration. A resolution was discussed and passed ordering the appointment of a committee of five, with instructions to meet the committee with power to decide upon hours and wages, and further, to present the association's platform, which is identical with that of the National Association of Builders, with the statement that an indorsement of this document is necessary in any negotiations, and none be entered into or discussed that in any way conflicted with it.

The president appointed as such committee, W. F. Behel, J. L. Deitz, S. H. Dempsey, W. Irving Clark, Francois Blair. It was then voted as the sense of the association that eight hours should constitute a day's work, and 35 cents per hour be paid for first-class carpenters.

## Our Illustrations.

The Ricardi Apartment House, Chicago. H. B. Wheelock, architect.

Exchange Building, Boston, Massachusetts. Peabody & Stearns, architects.

Gate Lodge, Fairmount Cemetery, Denver, Colorado. H. T. E. Wendell, architect.

Mortuary Chapel, Fairmount Cemetery, Denver, Colorado. H. T. E. Wendell, architect.

Mothers' Jewels' Home, York, Nebraska. Crapsey & Brown, architects, Cincinnati, Ohio.

Residence of William B. Knight, Esq., Kansas City, Missouri. Adrience Van Brunt, architect.

Residence of W. A. Ingraham, Esq., Bristol, Connecticut. C. H. Stilson, architect, New Haven, Connecticut.

PHOTOGRAVURE PLATES.

(*Issued only to subscribers for the Photogravure edition.*)

Residence of Mr. J. F. Cox, Camden, New Jersey. Hazelhurst & Huckel, architects, Philadelphia.

New Power House and Office Building, for the People's Railway Company, St. Louis, Missouri. J. H. McNamara, architect.

Summer Residence of Mr. James Van Inwagen, Lake Geneva, Wisconsin. E. Hill Turnock, architect, Chicago. Two floor plans are shown.

Residence of Mr. A. W. Chamberlin, Denver, Colorado. Kidder & Humphreys, architects. Four full-page plates are given showing the following views: Exterior with floor plan, reception room, dining room, billiard room. All interior woodwork and finish included in architect's drawings. Cost of house $35,000.

## Synopsis of Building News.

**Chicago, Ill.**—Architect W. D. Cowles: For E. D. Murray, a two-story flat building, 42 by 60 feet, to cost $12,000, on St. Lawrence avenue near Seventy-first street; to be of Peerless pressed brick and stone front.

Architect Clinton J. Warren: For N. K. Fairbank, a ten-story hotel; size 73 by 171 feet; to cost about $500,000; to be erected on the northwest corner of Twenty-first street and Michigan avenue. The first two stories will be of stone and above of buff terra cotta pressed brick with terra cotta cornice. The interior will be finished in hard woods and have marble wainscoting, tiled and mosaic floors, steam heat, electric light, three elevators and the best of modern improvements. It will be of steel construction and thoroughly fireproof.

Architect O. W. Marble: For J. W. Casket, making plans for three three-story and basement residences, to be erected on Lake avenue near Oakland boulevard. They will have stone fronts, hardwood interior finish, stained, plate and beveled glass, furnaces, etc., and to cost $35,000. For C. H. Brown he is making plans for a two-story basement and attic frame residence, to have stone basement, hardwood finish, stained, plate and beveled glass, furnace, and cost $10,000; to be erected at Decatur, Illinois.

Architect Robert Rae: For Harry Babcock, at Hinsdale, making plans for a two-story frame residence; to have furnace and all the improvements, and cost $5,000. He is making plans for an Episcopal church to be erected at Englewood; it will have a stone front and part stone sides, hardwood finish, steam heat, electric light, handsome stained glass windows, slate roof, square tower with belfry and clock, pews to accommodate a congregation of five hundred; it will be 50 by 125 feet in size and cost $50,000. He is also drawing plans for a seven-story apartment building 110 feet front by 50 feet deep, to be built of stone for basement and first story and the balance of pressed brick and terra cotta, with large bays of ornamental terra cotta and copper. He will put in steam heat, electric light, dumbwaiters, speaking tubes, two elevators, marble and tile work, hardwood finish, all the sanitary and modern improvements. It will be erected on Stony Island boulevard near Sixtieth street, for a syndicate. The cost will be upward of $150,000.

Architect D. A. Lapointe: For E. J. Lewis, making plans for a four-story apartment building, 120 by 75 feet; to cost $50,000; to be built on Warren avenue near Homan; it will have a rockfaced stone front and entrance, with granite pillars and marble steps, and wainscoting; he will put in hardwood interior, stained, plate and beveled glass, the sanitary and modern improvements. He is also making plans for a two-story flat building for Joseph C. Fetter, to be erected corner of Monroe street and Spaulding avenue; it will have a front of Peerless pressed brick and stone; will put in furnaces and all the improvements; the cost will be about $20,000. For James Arnold he is planning a three-story flat building of 100 feet front; to be built on the northeast corner of Artesian avenue and Lake street; to have pressed brick and stone front, and cost $16,000. For John W. Garvey, on Polk street, near Centre avenue, a three-story building; to cost $12,000. For M. W. Schmidt, at 1545 Monroe street, a three-story flat building; to cost $7,000.

Architect Julius Speyer: For Mrs. Mary E. Willey, five two-story dwellings; to be of pressed brick and brown stone and cost $25,000; to be built on Boulevard Place, near Vincennes avenue. For A. B. Lewis, at Montrose, a two-story store and hall building; to cost $10,000.

Architects Adler & Sullivan: For J. E. Dooley, at Salt Lake City, Utah, a six-story office building, 95 by 165 feet, of steel construction, to cost about $300,000. For M. Wainwright, at St. Louis, Mo., a nine-story office building, 114 by 127, of fireproof construction; to cost about $500,000. For a stock company at Salt Lake City, the "Ontario Hotel;" the contract for the foundations has just been let. They are also making plans for an opera house to be erected at Seattle, for a stock company.

Architects Frederick Baumann and J. K. Cady: For Richard Peck, on the northeast corner of Goethe street and Dearborn avenue, a four-story apartment building, 50 by 130 feet; to cost $75,000. It will have a front of Roman pressed brick and brown stone, steam heat, electric light, and all the improvements.

Architects Flanders & Zimmermann: For A. McLeish, at Glencoe, a handsome two-story residence, size 50 by 100 feet, first story of stone and above of frame; to have hardwood finish, steam heat, gas engine, and all the sanitary improvements; the cost will be $25,000. For B. Newhall, at Glencoe, a two-story frame residence, 40 by 70, to have stone basement, steam heat, the sanitary and

modern improvements, and cost $15,000. For Dr. Eaton, on Wabash avenue and Forty-third street, a four-story store and flat building, 70 hy 65 feet; stone front and copper bays, hardwood interior, marble and electric work; cost $25,000.

Architects Edbrooke & Burnham: For Frank Gazzola, a four-story store and flat building; to have two fronts of stone; to he erected corner of Huron and Wells; the cost will he $22,000. For J. V. Rider, at Dubuque, Iowa, a three-story store and office building; to have a pressed brick and terra cotta front, steam heat and the modern improvements, and cost $25,000.

Architect R. G. Pentecost: For Edward Mendel, a three-story residence, of huff Bedfords tone front; steam heat, hardwood interior finish, onyx mantels, tiled floors, marhle wainscoting and the hest of sanitary arrangements; the cost will he $15,000; making plans. The location is 3928 Grand houlevard. For Charles R. Cave he is making plans for a three-story residence, to he huilt at 3932 Grand houlevard; it will have a Georgia marhle front, steam heat, marhle and tile work, and cost $20,000. For Albert Mendel, at 3926 Grand houlevard, he is drawing plans for a three-story residence, to have a hrown stone front, steam heat, hardwood interior, onyx mantels, marhle and tile work and all the sanitary specialties; the cost will he about $15,000.

Architect W. W. Boyington made plans for a one-story addition to the Julian House, at Duhuque, Iowa; to he of pressed hrick, and cost $25,000.

Arcbitect L. G. Hallberg: For S. Ganns, a three-story apartment building; to have a Bedford stone front; to he huilt on Washington houlevard near Western avenue. For John Erickson, on Blucher street near Noble avenue, a three-story flat huilding.

Architect Frederick Ahlschlager: For John Frederick, at 982 West Twelfth street, a three-story flat huilding; to have a Bedford stone front; the modern improvements.

Architect L. J. Schauh, for Kaspen Brothers, at the corner of Park and Wood streets, a six-story factory, size 85 by 125 feet, to cost $30,000. The front will he of St. Louis pressed hrick, iron and glass; he will put in elevator, steam heat, etc. For J. McAuliff, at 602 N. Paulina street, a three-story flat huilding, of St. Louis pressed brick front.

Architect H. T. Kley: For Charles Muensch, on Milwaukee, Carpenter and Huron streets, a four-story store and flat building; to have three fronts of Collinsville pressed hrick and Connecticut brown stone; iron heams and columns and the sanitary improvements; cost $35,000.

Architect J. S. Villere is working on plans for a four-story store and flat huilding, to he erected on North Clark street. The front will he pressed hrick and stone; the interior in hardwood; electric light and all the improvements; cost $25,000.

Architect H. B. Wheelock: For Messrs J. M. Stehbins and J. G. Cozzens, a six-story apartment huilding; size 127 by 121 feet; to he erected on the northwest corner of Indiana avenue and Twenty-fourth street. It will have two fronts of Portage hrown stone and Tiffany pressed brick; the interior to he finished throughout in hard woods; have hot water heating, electric light, elevators, mosaic, marhle and tile work; to he of fireproof construction and cost upward of $200,000.

Architects Faher & Pagels are making drawings for a ten-story hotel; size 75 by 110 feet; to cost about $175,000. It will have a rockfaced stone front; stained and plate glass windows, hardwood finish, four elevators, steam heat, electric light, marhle vestibules, mosaic and tiled floors, and the hest of sanitary improvements. There will he a hall on the top floor, to have opera chairs and to accommodate an audience of about a thousand. For Messrs. Thorpe, Gherke, Kurchby, Faher and Pagels, making plans for five two-story residences; to have stone fronts, hardwood finish throughout, steam heat, dumhwaiters, speaking tuhes, electric bells, gas lighting, and slate roof; cost $50,000. They will he huilt on Columhia street, which will he improved with paving, houlevard lamps, stone sidewalks, etc., hy private contract.

Architect Perley Hale: For M. English, planning a four-story store and flat building, 50 hy 76; and a six-story storage house, 50 by 90; to he of rockfaced stone front, have modern improvements, and cost $50,000. They will he huilt on Archer avenue, west of the Alhamhra theater.

**Cleveland, Ohio.**—Architects Lehman & Schmitt: For the Sheriff Street Market and Storage Company, a six-story market and storage building, size 118 hy 298 feet, hrick and stone; cost $15,000.

Architect S. R. Badgley: For H. B. Hunt, a six-story hrick shop, size 48 hy 43 feet; cost $9,000.

Architect George H. Smith: For R. T. & C. G. King, a six-story hrick huilding, size 144 hy 123 feet; cost $40,000.

Messrs. Cohurn & Barnum: For A. M. Smith, a two-story frame dwelling, size 32 hy 29 feet; cost $6,000.

Architect F. C. Bate: For the Bethel Union, a five-story hotel, size 54 hy 48 feet, hrick and fireproof throughout; cost $15,000.

Architect G. F. Hammond: For J. W. Britton, a frame rolling mill; size 112 by 160 feet; cost $5,000.

Architect C. O. Arey: For J. W. Burry, a two-story frame dwelling and barn, size 30 hy 44 feet; cost $4,800. Also for Mrs. Carrie E. Randall, a two-story frame dwelling, size 29 hy 22 feet; cost $4,300.

169 permits issued during Novemher, new frame ..... $169,295
9 " " " " brick..... 229,800
78 " " " " alterations..... 18,684

256 Total, $417,779

**Cincinnati, Ohio.**—Reported by Lawrence Mendenhall:

Thanksgiving Day, with its stuffings and aches, its pleasure and sadness, has come and gone, and as hleak Decemher hegins to make its presence felt, marking the close of a year's work, let us stop and be thankful for a season reasonably prosperous. Every year has its troubles which have to he met, and such being the case let us he men, and throw around a cheerful influence, helping thereby others less hopeful and weak. To he sure the strike did hurt trade, hut notwithstanding, the total amount expended in building in Cincinnati will exceed last year. Death has dealt kindly with us here, the profession having lost only one member—Mr. A. C. Nash.

Cincinnati has improved, and will continue to improve, architecurally, from now on. The Smiths, always our pride, will also receive attention, and many heautiful residences will he found occupied hefore the close of another year.

I present in connection with next season's prospects the following extract from an interview with a delegate to the American Federation of Lahor, meeting in Detroit Decemher 8. I will make no comments on it except to say, that it might he well to take notice of it in making up contracts:

"About the most important husiness that will come up will he with reference to the eight-hour agitation. Last spring the carpenters struck for eight hours and were successful in many cities, while in others they secured shorter days. This has encouraged all union men, and after deciding upon the method of educating the people on this suhject, there will come the decision upon who is to make the movement next spring. This agitation is attracting the attention of the world, hy reason of its importance, and the discussion upon it will doubtless he the most important during the session."

But, let me say to the mechanic, that bricks and mortar are not the only means available for investments. This is not intended as a threat, hut purely friendly advice.

Architect Gustave W. Drach reports for Fred Davenport a residence; materials, frame, slate roof, furnace, stained glass, gas, plumbing, etc.; cost $6,000.

Architect W. W. Franklin reports for Daniel W. Brown, secretary B. C. Affairs, Cincinnati, a residence; materials, pressed brick, stone, slate roof, gas, plumbing, hlinds, etc.; cost $9,000.

Architect J. H. Kuckertz reports for Messrs. Chatfield & Woods, city, a warehouse, size 17 hy 57, three stories high; cost $6,400.

Architect John H. Boll reports for Mr. John Rahe a residence; materials, frame, slate roof, wood mantels, hardwood finish, electric hells, plumhing, etc.; cost $8,000.

Architect Henry E. Siter reports for Mr. Charles H. Duhme a residence; materials, stone, slate roof, hardwood finish, electric hells, stained glass, gas, plumhing, mantles, etc.; cost $25,000.

Architect G. W. E. Field has drawn the plans for an office building for the Union Central Depot Company; materials, Anderson pressed brick, iron work, hardwood finish, electric hells, tin roof, elevators, gas, plumbing, etc.; cost $100,000; size 40 hy 102. For the C. C. C. & St. L. Railway, at Cincinnati, a storage warehouse; materials, hrick, iron work, tin roof, hydraulic elevators, electric lights, gas, plumbing, etc.; cost $75,000.

Architect Theodore Richter, Jr., has prepared plans for a residence for Mrs. F. G. Schmuck; materials, hrick, stone, slate roof, grates, water, mantels, hardwood finish, plumhing, etc.; cost $7,000.

Messrs. Aiken & Ketchum report as follows: For Mr. Colin Gardner, of Middletown, Ohio, a residence; materials, hrick, slate roof, hardwood finish, stained glass, gas, plumhing, etc.; cost $25,000.' They are also engaged on the plans for a chapter house for the Alpha Delta Phi fraternity of Bloomington University, Bloomington, Indiana.

**Denver, Colo.**—Architects Lee & Boel are preparing plans for the following: Residence for Mr. Baily, cost, $7,000; residence for Mr. Sternes, cost, $7,000; residence for Mr. Bovier Peterson, cost, $7,500; residence for Mr. Shackelford, cost, $14,000; also terrace six houses for H. Hegwer, cost, $18,000; residence for Mr. Stewart, cost, $14,000; residence for Mr. Hardinge, cost, $6,800. Bids opened on last two. They have also plans for a private hotel on "The Hill" to cost $48,000.

The Auditorium project is being pushed with all possihle vigor.

Architects F. E. Edhrooke & Co. have prepared plans for a large huilding to he known as the "Colosseum Exposition." The huilding will be 340 hy 206 feet, with a wing of 20 hy 30 feet to he used for stores, offices, etc. Cost to he $150,000. Work to hegin at once.

**Detroit, Mich.**—Architects Spier & Rohn, for Coppits, Melchers & Co., a five-story brewery, size 150 hy 90 feet, hrick and stone trimmings; cost $50,000.

Architects John Scott & Co., for P. W. McAdow, a two-story residence, size 55 by 80 feet, pressed brick with stone trimmings, tile roof; cost $35,000. Also for the Peninsular Car Company, a brick foundry and machine shop, size 217 hy 180 feet; cost $35,000.

Architects A. C. Varney & Co., for William Reed, a two and one half story brick residence, slate roof; cost $7,000.

Architects M. Smith & Son: For Allen Brown, a two-story residence, brick with stone trimmings, slate roof; cost $10,000.

Architect A. E. French: For Thomas A. Mathews, a two-story frame residence, 25 hy 50 feet; cost $1,500. Also for John Clee, a 45 hy 40 feet hrick addition to store; cost $6,000. For H. J. Zender, a two-story brick store and flats, size 40 hy 60 feet; cost $5,000.

Architect Peter Dedericks: For the Goehel Brewing Company, a four-story brick stock house; cost $10,000.

Architect George E. Depew: For Charles H. Dings, a three-story double brick residence; cost $6,500.

Architects Hess & Raseman: For the St. Paul's Protestant Episcopal Church, a three-story rectory, size 40 by 70 feet; pressed brick, cut stone trimmings and slate roof; cost $150,000. Also adding galleries to the Trumhull Avenue Presbyterian Church, at a cost of $5,000.

Architects Donaldson & Meier: For Richard Carter, of Windsor, Ontario, a two-story brick residence, stone trimmings and slate roof; size 30 hy 42 feet; cost $5,500.

William Darmsteater will erect a three-story store house, size 80 by 34 feet, brick; cost $10,000.

Henry W. Holcomb will build a two-story hrick residence, to cost $7,500.

**Kansas City, Mo.**—Architect W. A. Kelley: For Jackson county, a brick and stone jail; southwest corner of Oak street and Missouri avenue; 158 hy 120 feet, three stories, tile roof; cost $70,000. This jail will he fitted up with all the modern conveniences, including gas and electric lighting, and a steam heating plant.

Architect E. C. Hamler: For L. Timmer, a brick residence, 24 hy 40, two stories; costing $2,000; on Nineteenth street hetween Tracey and Lydia avenues. Contract not let.

Architect J. T. Baxter: For William Hoelzel, a brick residence, 23 hy 43, two stories; at Twenty-eighth and Cherry streets; costing $2,000. Also for J. D. Swan, a brick residence, at 3215 East Ninth street; 35 hy 45, two stories; costing $4,000.

Architect H. J. Simons: For P. S. Gidley, a row of brick flats, four stories; at Twelfth and Jefferson streets; to cost $50,000. All modern conveniences.

Architects Vrydaugh & Shepard: For Rood & Pliven, brick livery harn, two stories and basement, 50 hy 100 feet; Fifteenth and Walnut streets; $6,000.

Architect Wm. Wood: For the Husted Investment Company of Kansas City, Kansas, eight brick residences, averaging eight rooms each; in Chelsea Park addition; ranging in cost from $3,000 to $5,000.

K. C. Maywood will build a two-story brick residence, 26 hy 37 feet, at Agners and Independence avenues; costing $2,500.

**Little Rock, Ark.**—Architect Fred. J. H. Rickon: For Dickinson & Darragh, a four-story store, to he erected on Markham street, near Commerce; at a cost of $20,000. Also has plans for three brick residences for Capt. J. R. Miller, on Lincoln avenue; to cost $15,000.

**Minneapolis, Minn.**—The Westminister Church congregation will erect a mission chapel, brick and stone, at a cost of $10,000. Mr. C. S. Kendrick will build a two-story residence; brick and frame; cost $12,000. Mr. Chas. Lyon, a two-story frame dwelling; cost $6,000.

**Pittsburgh, Pa.**—Architects Hodgdon & Thomas: For Mr. H. A. Davis, a three-story flat huilding; cost $8,000. Ross & Marshall, contractors. Mrs. Sarah Savage will erect a large hotel here; size 45 hy 75 feet; brick and stone; work to he begun in the early spring. Architect J. W. Offerman has prepared plans for Mr. F. Cartwright at Shadyside, for two two-story brick and frame dwellings; to cost $16,000. Also for Mr. J. Flinn, a three-story brick residence; cost $5,000. Architects Longfellow, Alden and Harlow, of Boston, have prepared plans for additions and alterations to Pittsburgh clubhouse; to cost about $20,000. Also for Mrs. E. Schwartz, a brick residence; cost $15,000.

**Salt Lake City, Utah.**—Architects Adler & Sullivan, of Chicago, are building the Ontario Hotel, a mammoth huilding in area, six stories high, foundations almost completed, to cost about $600,000. Architects Mendelssohn, Fisher & Lawrie, of Omaha, are huilding the East Side Hotel, also six stories high, of considerable area and of very solid, plain yet dignified style. Architect Fred Hale is huilding a store, 100 hy 120 feet, six stories high, to cost about $150,000. Architects Carroll & Kean a six-story store and office building for Walker Bros., 50 hy 150 feet, to cost $100,000, foundations just let, are among the new huildings to he completed. There is a local fight on just now in regard to the city hall to he huilt, which is very interesting, as Architect C. E. Illsley, of St. Louis, who was called in as expert hy the mayor, very properly condemned the plans that were being used.

**Seattle, Wash.**—Plans are being prepared for a new high school huilding.

**St. Louis, Mo.**—Mrs. Harriet Beers will erect a five-story brick botel; to cost $18,500. The Anheuser-Busch Brewing Company will huild a five-story brick stock house; cost $30,000. Henry Bischoff will erect a two-story brick warehouse; cost $10,000.

**Rochester, N. Y.**—Architects Otis & Crandel are doing for the Eastman Dry Plate Co. a huilding 150 hy 300 feet, story and a half; will he huilt of hrick, and cost $15,000. This is the first huilding of a very large plant that the Eastman Dry Plate Co. will erect for the manufacture of the Kodak camera, dry plate, etc.

Architects Warner & Brochet are doing for Messrs. Atwater, Armstrong & Clark a brick huilding 76 hy 200 feet, four stories high, slow hurning construction, of thick floors and heavy timhers; will he used for manufacturing purposes, and will he furnished with heavy freight elevator, and the Sturdevant Hot Blast heating system; cost $60,000. Also for D. Armstrong & Co., at Batavia, N. Y., a brick shoe factory, 50 hy 200, four stories high; to cost $50,000.

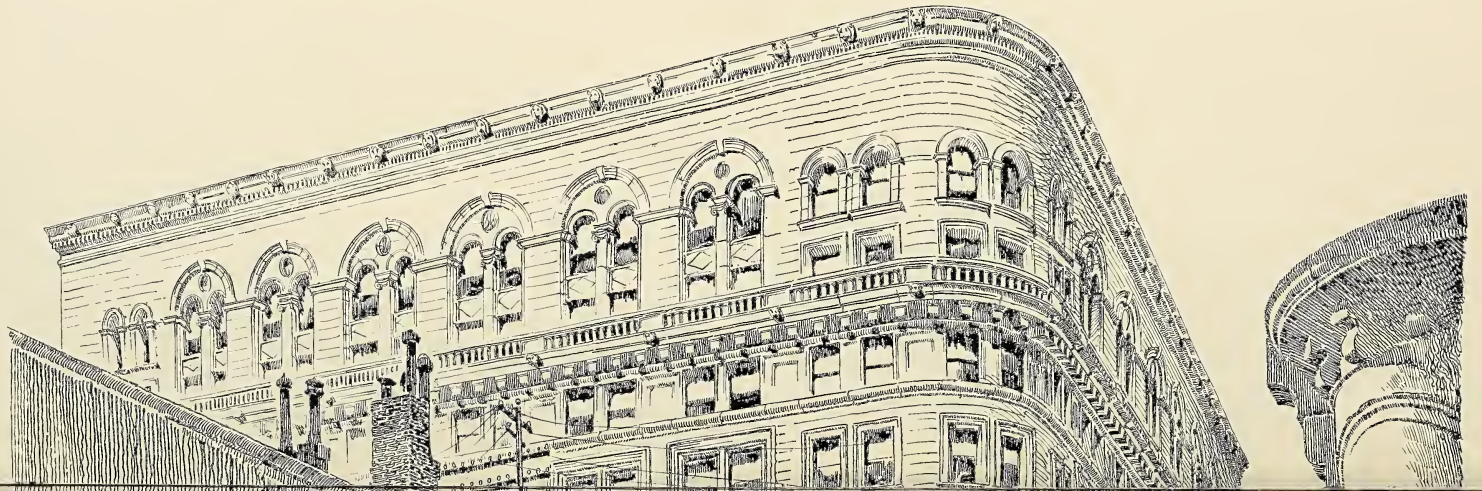
Architect J. R. Church is building an addition to the Central Presbyterian church; to cost $50,000. It will be of Jersey granite brick with stone trimmings; will have seating capacity of 1,700, and he fitted up inside with stained glass, hardwood finish and most improved church fittings. As soon as the new part is complete the old church will he refitted for Sunday school use. The McKay building, a seven-story brick building, 90 hy 85 feet, is nearly complete at a cost of $35,000.

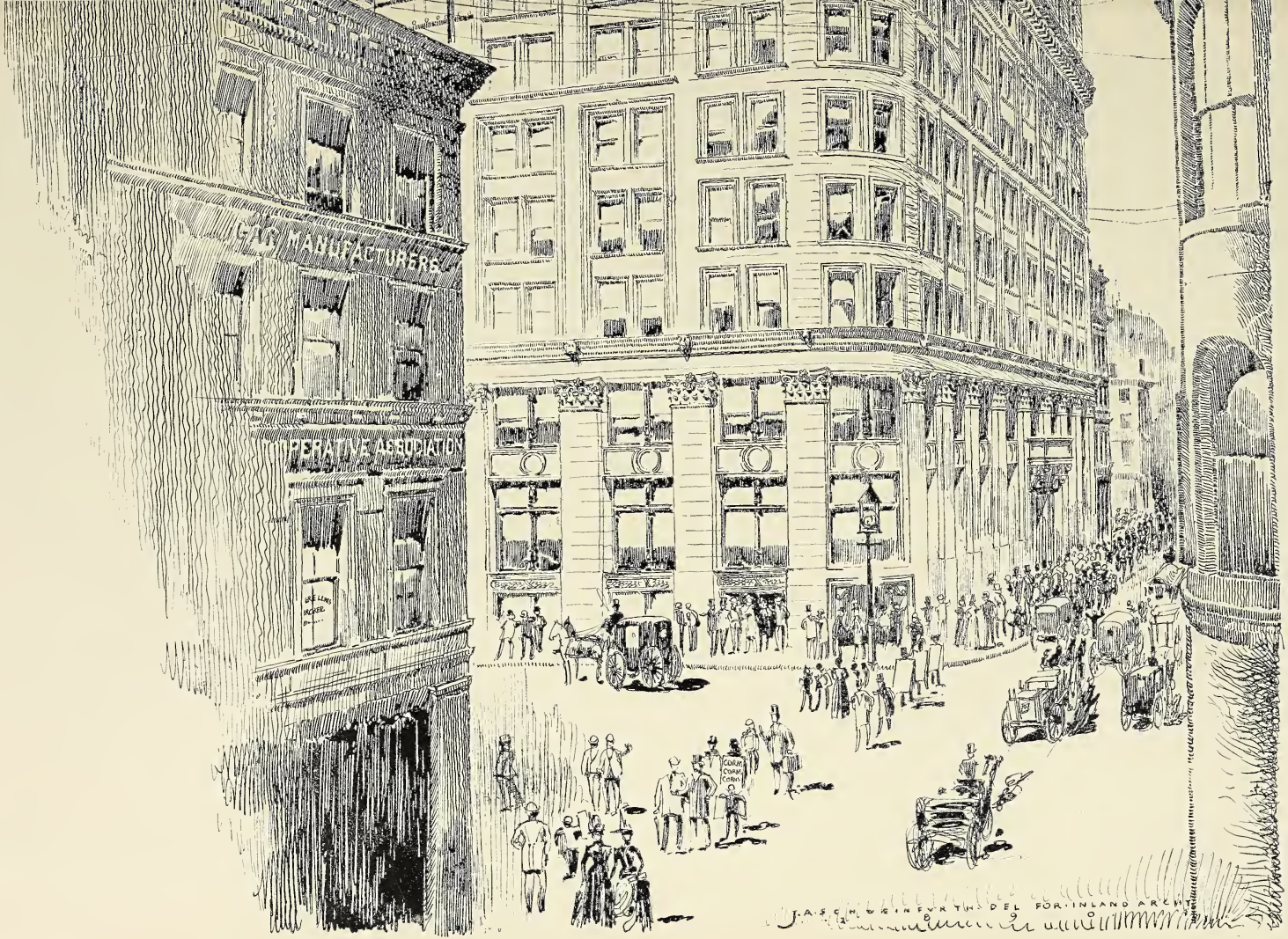
**Zanesville, Ohio.**—Architect H. C. Lindsay: For Thomas E. Richards, two-story frame residence, size 27 hy 48 feet; cost $5,000.

# EXCHANGE BUILDING

## BOSTON MASS.

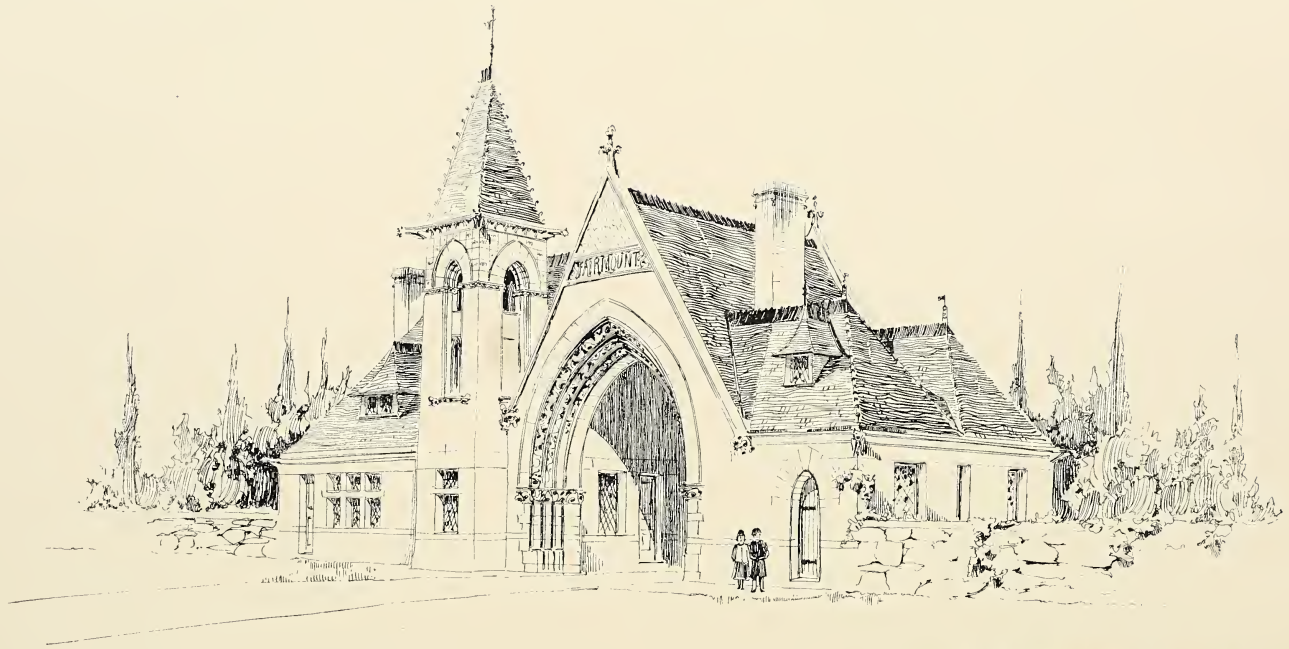
### PEABODY AND STEARNS ARCHTS.



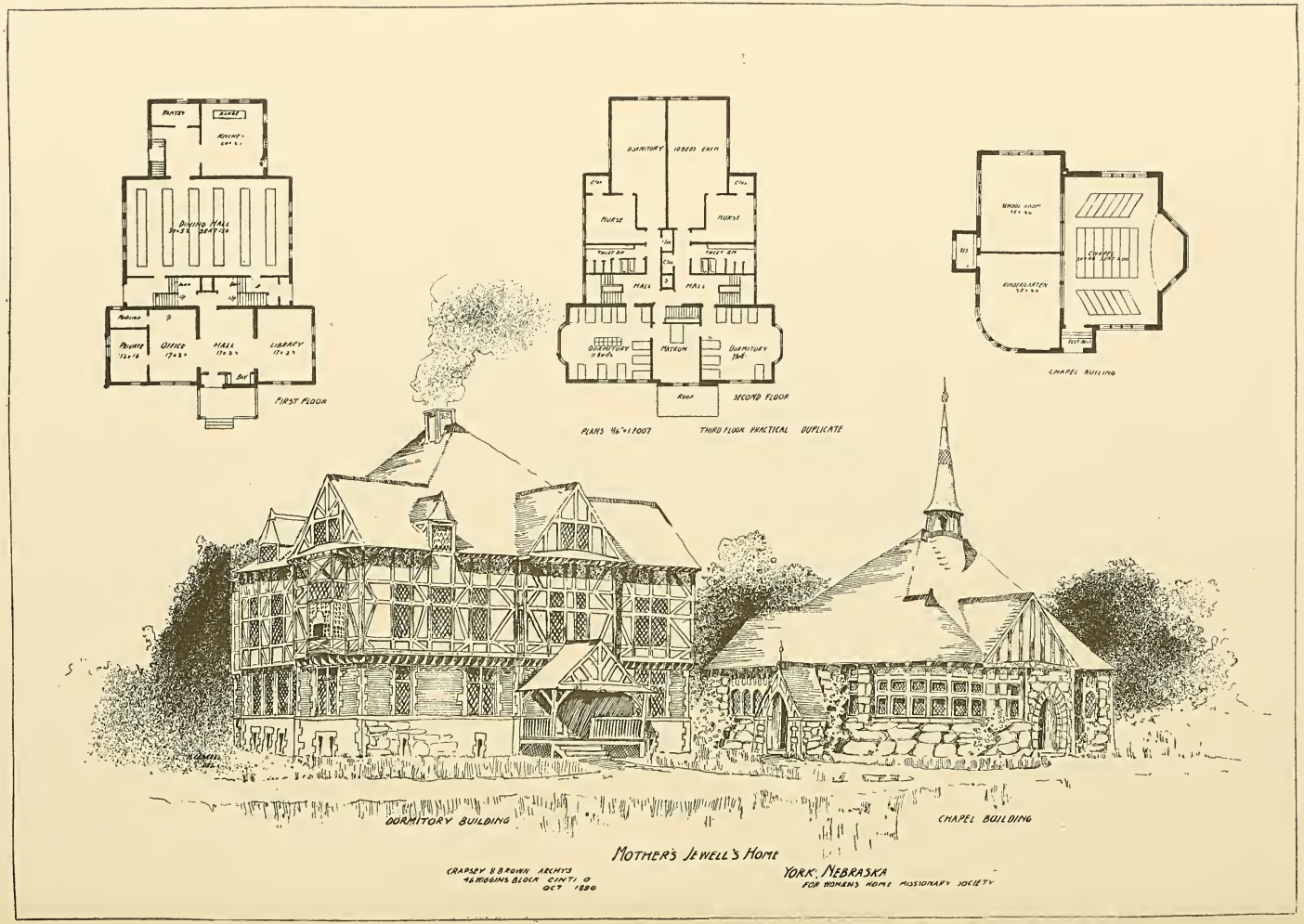

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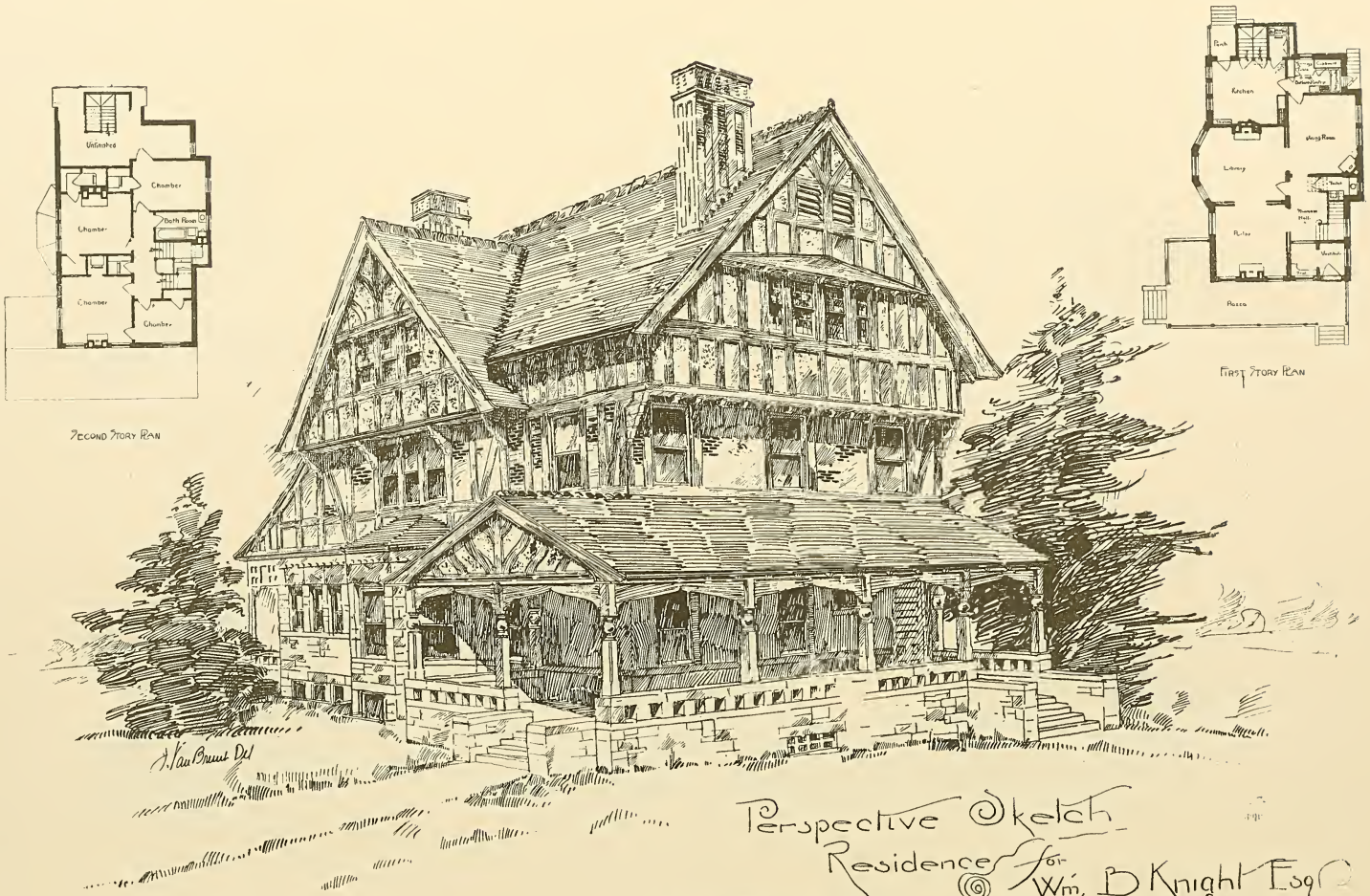
# EXCHANGE BUILDING
## BOSTON MASS.
### PEABODY AND STEARNS ARCHTS.

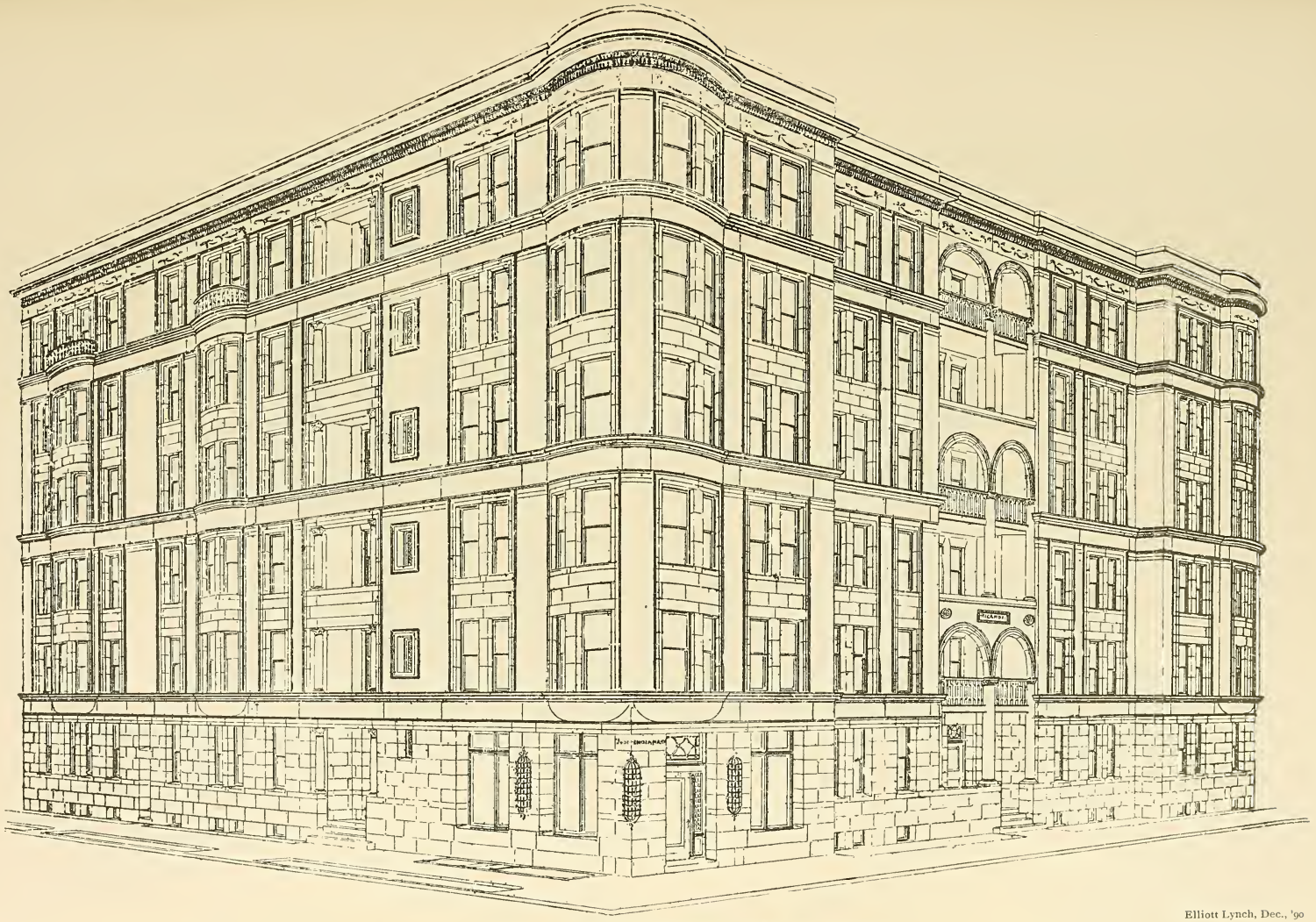





:GATE:LODGE:FAIRMOUNT:CEMETERY:H.T.EWENDELL.ARCHT.
DENVER:COLO:


PANTRY
KITCHEN
DINING HALL
PRIVATE
OFFICE
HALL
LIBRARY
FIRST FLOOR
DORMITORY
NURSE
MATRON
SECOND FLOOR
PLANS No 1 1007
THIRD FLOOR PRACTICAL DUPLICATE
SCHOOL ROOM
CHAPEL
KINDERGARTEN
CHAPEL BUILDING
DORMITORY BUILDING
CHAPEL BUILDING
MOTHER'S JEWELL'S HOME
YORK, NEBRASKA
FOR WOMEN'S HOME MISSIONARY SOCIETY
CRADSBY & BROWN ARCHTS
OCT 1890


Unfinished
Chamber
Chamber
Bath Room
Chamber
Chamber
SECOND STORY PLAN
Porch
Kitchen
Dining Room
Library
Hall
Parlor
Vestibule
Piazza
FIRST STORY PLAN
A. Van Brunt Del
Perspective Sketch
Residence for
Wm. B Knight Esq
Kansas City Mo
A. Van Brunt Archt



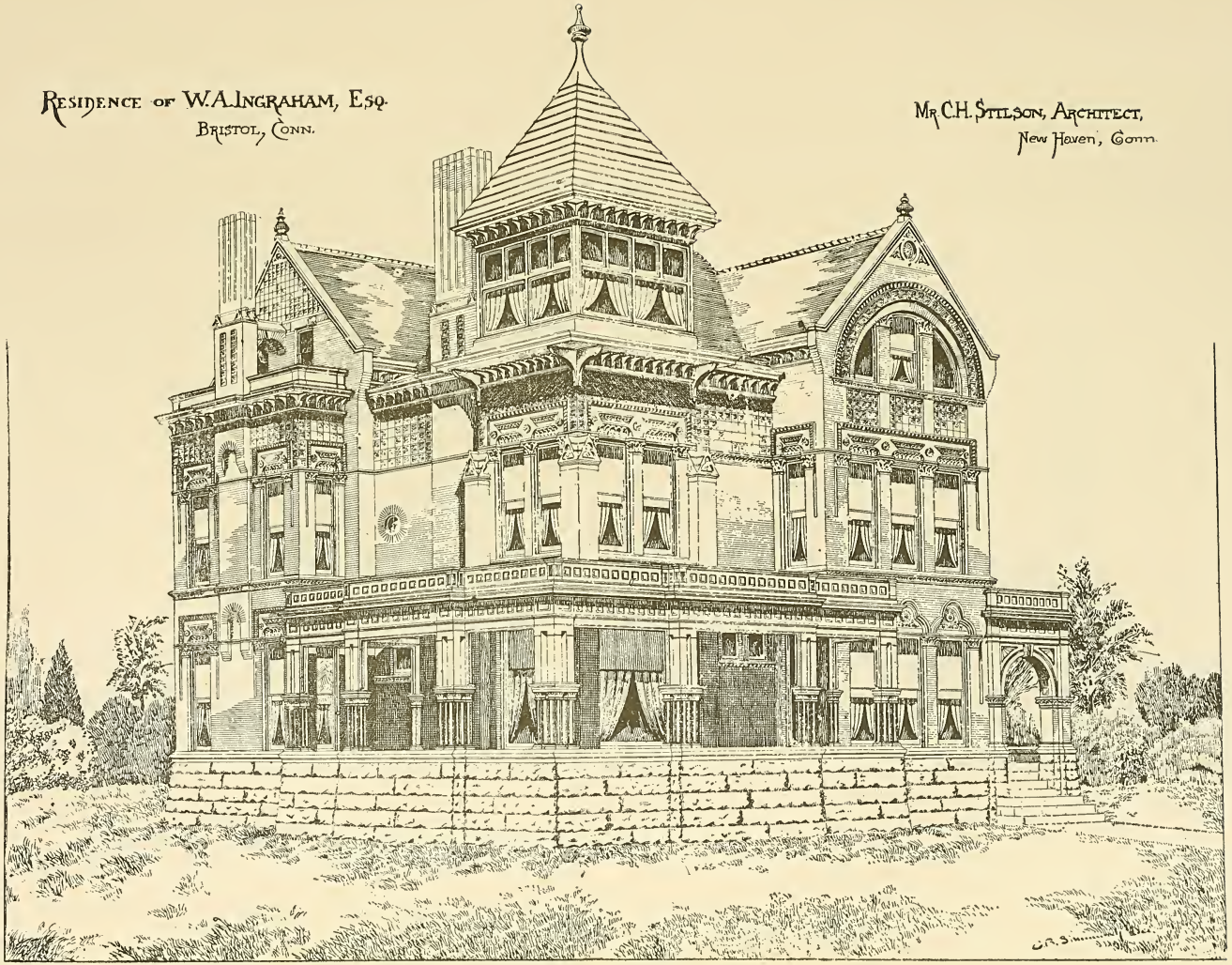
Elliott Lynch, Dec., '90

THE RICARDI APARTMENT HOUSE, CHICAGO.

H. B. Wheelock, Architect.

RESIDENCE OF W.A.INGRAHAM, ESQ.
BRISTOL, CONN.

MR.C.H.STILSON, ARCHITECT,
NEW HAVEN, CONN.





MORTUARY CHAPEL FAIRMOUNT CEMETERY H.T. EWENDELL ARCH'T.

# THE INLAND ARCHITECT AND NEWS RECORD

Vol. XVI. JANUARY, 1891. No. 8

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WE feel that no apology is thought necessary from us on account of the long delay in issuing this, the January number. Believing that the circumstances attending the death of Mr. Root, and a memorial of his life and works, were of paramount importance to our readers, the journal has been held back until these could be collected and properly arranged, the time consumed being longer than was at first anticipated.

Death of Architect John Wellborn Root.

On January 15, 1891, John Wellborn Root died after an illness of four days at his residence in Chicago. While at rare intervals it comes to a people or a nation to write such lines, that bear huge import of change and loss, it is still more rare for a class or a profession to see that light which in its initial brilliancy shone so far, and which seemed pregnant with so much greater power, go out suddenly, and leave the darkness felt. In this darkness, we, who were so close to him, are conscious of nothing but his loss, and while we know there are other lights brilliant and strong, soon to be all-pervading, we can now but record this, leaving others to compute its true effect. In the perfect symmetry of Mr. Root's character—where with that rare quality, genius, was blended all the graces of a gentleman—can be found that strange influence which endeared him to every member of his profession, and made up the sum of that which we call his popularity, and gives to the announcement, "John Root is dead," a shock and sense of personal loss. He walked among us, and with him we deliberated in council, we laughed in the hours of recreation, and without knowing it or thinking about it we loved him. We never thought that it was that rare character combining executive ability, knowledge of men, a pure and honest heart, a fearless nature, a love for all things beautiful, an understanding and sympathy with all art and all music, that drew others to him and makes his loss personal. Tomorrow we will look at his work, and as the years go by we will compare it with that of the day, and we will understand its value and its place in the history of the nation's architecture. Unbound by precedent in design, but always grammatical, we have thought him our greatest architect, both in achievement and promise. Other pages will tell his story as well as such a story can be told. His works are about us, and

> "His memory will live alone
> In all our hearts, as mournful light
> That broods above the fallen sun,
> And dwells in heaven half the night."

In Regard to Mr. Root's Public Offices.

Of the offices left vacant by the death of Architect John W. Root, that of secretary of the American Institute of Architects, and consulting architect of the Columbian Exposition, it is too soon to speak definitely. In regard to the former, nothing will be done until the April meeting of the board of directors, when a secretary pro tem will probably be appointed. Meanwhile, the office will remain without change, business being transacted in the secretary's name, under the direction of the Chicago members of the Executive Committee, and the advice of the president. There is no probability that a new consulting architect will be appointed. The work was left so thoroughly outlined by Mr. Root, that with the chief of construction in

an official capacity, and the advice of Mr. Hunt, which is always available by the architectural commission, any appointment would seem to be superfluous, if not positively unadvisable.

The World's Progress in Music Neglected.

While those directing the Columbian Exposition have amply provided for what they call the liberal arts, and also for everything mechanical and the products of the soil, there seems to be at least a hesitancy in expending money in the erection of buildings whose purpose will be in the line of exhibiting the history and progress of the fine arts. While it is probable that private capital will step in and rescue one of these, painting, from the oblivion of nonrepresentation, that of equal importance, music, seems to have been given no place. In these practical minds an exhibit of electrical progress is all important, for it is something that will probably return a dollar for every one expended; but when it is proposed to show the state of civilization by exhibiting musical progression the astute mind stops and asks, "will it pay?" It is hoped that this is a mistake. That the directory that has so far shown that it knows the value of art as well as the value of money in many ways, will see the immense importance of placing this country upon the plane in musical matters to which it belongs, and provide a temple of music that will not only be a source of pleasure and instruction to our own people, but show to foreign visitors that this most divine of the arts is not a lost or an ignored art with the people of this continent.

Columbian Exposition Architects Named.

The appointment of architects for the Columbian Exposition, outlined in our last issue, has been consummated with exceedingly satisfactory results. It is remarkable, in the light of the past treatment of architects in this country by all public officials, that the directors of this great enterprise should place themselves on record in such thorough opposition to all custom, and recognize the profession as a profession, and establish a precedent that will relegate the board of county, state or national commissioners that refuses to appoint architects, and that propose a general competition, to the ranks of the most ignorant, if not the most vicious. In this the World's Fair officials have done the architecture of the future an incalculable benefit, while insuring success in their own enterprise. It must be understood that to the late consulting architect and the chief of construction is due the credit of placing the plan carried out before the directors, and to their influence largely that it should be carried out so perfectly. In the choice of architects, their thorough knowledge of the requirements and of the ability of the several appointees was of the greatest value, and so recognized, that every suggestion of theirs was carried out. The five architects to whom are intrusted the buildings that group with the central building, devoted to manufactures and the liberal arts, will work them out as one scheme, and largely under the direction of Mr. Hunt. The special building which each firm will design is not announced, but Mr. Hunt will of course design the central building, and probably Mr. Post the agricultural, McKim, Mead & White the electricity, Peabody & Stearns the machinery, while the administration building could be given a most dignified and scholarly effect by Van Brunt & Howe. Of the remainder it is probable that the known ability of Adler & Sullivan to solve the problem of how to best handle a crowd in a building, has given them the transportation building; the mining interest could not be better subserved than in the hands of Mr. Beman; Mr. Cobb, who does everything well, will design a building for exhibiting the products of the sea that will be as delightful in design as it will be appropriate. In the entrances, one of the most important features from a point of design in the entire work, Burling & Whitehouse will present some interesting compositions; and Mr. Jenney, who, next to Mr. Olmsted, is best known in the line of landscape architecture in this country, will combine this knowledge with his architectural ability, to make the horticultural building one of the chief features of the fair.

Proposed World's Architectural Exhibit.

We are glad to note that our suggestion some months since in regard to a discussion by the Illinois Chapter of the American Institute of Architects of the best method by which an exhibit of materials used in building construction might be established in the Columbian Exposition, was immediately adopted, and in another column we print a lengthy address upon the subject presented by Mr. Adler at the December meeting. While it is not probable that a special building can be secured by the chapter for this purpose, ample space would certainly be provided from the twenty-two acres which will be given to the liberal arts in the central building. In his paper Mr. Adler particularizes all that we have said in general in regard to the progress of architecture, a congress of architects, a collection of models of important architectural and engineering works, etc. In fact the exhibition, with proper enthusiasm as an impetus and proper management as a guide, could be made, as we have said before, one of the most important and instructive of all the collections of the works of man to be seen at the exhibition of 1893.

The N. A. B. and the Trade School Question.

The National Association of Builders has, since its organization four years ago, inaugurated movements that have for their object the highest good of all labor in the building trades. They have, moreover, it seems, made a selection of that which can be the broadest in its results, and affects most closely the wellbeing of all the rest. This is in the direction of the education of mechanics. New York and Philadelphia contain the best and almost the only trade schools of any magnitude in the country, and the Executive Committee, in preparing a programme for the coming convention at New York, have arranged that a day and a half shall be given to the study of these schools by the delegates. It is in thorough accord with the practical quality of the gray matter that pervades the heads of the members of this association that they should, so early in its history, strike the focal point toward which all the rays of labor affairs converge The members of the Philadelphia Exchange recognized this, and in building their new quarters they provided liberally for a trade school. Colonel Auchmuty, of New York, has long labored in this field, and has established such a one as has no equal in either continent. It has, moreover, been the conviction of the national association from its inception, that upon the development of the trade school idea depends the salvation of the building trades, and this belief can never be emphasized more completely than by ocular demonstration. It is, accordingly, the policy of the association that each delegate shall go home fully versed in the method of operation and work of trade schools.

## John Wellborn Root.

BY HENRY VAN BRUNT.

IT is difficult, while yet our hearts are sore with a sense of bereavement, to review with eyes of cool judgment the unfinished life of a man professionally so conspicuous and personally so well beloved as John Wellborn Root. The stroke, which has deprived us suddenly of the gracious bodily presence and the active human sympathy forever, seems to throw over our memory a spell, through which the story of the bright career now closed is changed to poetry, and the voice now silent becomes a song. This pathos of death converts a memorial into a panegyric, unless the impulse of affection to gild and of admiration to extenuate is carefully corrected and chastened.

"For it so falls out,
That what we have we prize not to its worth,
Whiles we enjoy it; but being lack'd and lost,
Why, then we rack the value; then we find
The virtue that possession would not shew us
Whiles it was ours. * * * * *
The idea of his life shall sweetly creep
Into our study of imagination,
And every lovely organ of his life
Shall come apparalled in more precious habit,
More moving, delicate and full of life
Into the eye and prospect of the soul
Than when he liv'd indeed."

It is the fortune of every true artist to have the best, the essential part of himself made visible in his works. His mental development has a concrete, tangible expression, which can be studied and analyzed in the light of his achievements. He who would know Root as he really was—a man of genius and accomplishments, of generous impulse, of quick invention, of inexhaustible zeal—must look for him rather in what he accomplished professionally than in the accidents and incidents of his external career. Sir Christopher's epitaph referred not to his monument alone, but to his whole life. I tell the brief story therefore of the events which occurred between the birth and death of our friend, merely to introduce and explain, so far as they may, the man himself, as he more fully revealed himself in the best architecture of the West, upon which his example has undoubtedly conferred many of its most marked characteristics. To interpret the part which he played in that architecture is to give to the world the portrait of his restless and indomitable genius, and it is with this that I am mainly concerned.

His father, Sidney Root, a native of New England, was a wealthy merchant in Georgia before the war, and his mother was a native of that state. John, the eldest son, was born at her southern home January 10, 1850; but, while he was yet an infant, his parents moved to Atlanta, where he spent his boyhood. When the army of Sherman occupied that city the family, by military necessity, in common with other non-combatants of the place, was compelled to leave, taking refuge in the southwestern part of the state, whence presently the boy was sent to England by a blockade runner from Wilmington, N. C., so that he might secure an education more thorough than the conditions of the South at that time permitted. He attended school for three years at Claremont, near Liverpool, and in 1867 passed the preliminary examinations for entrance to the University of Oxford.

Meanwhile his father, still in good circumstances, had moved, after the close of the war, to New York, to which place John was recalled from abroad in 1867. He entered the university of that city and graduated about 1870 with high honors. At school and at college it seems that he was noted for the ease with which he assimilated knowledge, and for the sureness with which he retained it. He was equally renowned, at this part of his career, as an athlete and a scholar. His architectural tendencies were early developed, and his studies in New York were largely directed toward engineering and other sciences allied to his chosen profession.

At the conclusion of his college course he became a student in the office of James Renwick, the architect of St. Patrick's Cathedral in New York. Later he gained valuable experience in the employ of Mr. Snook, then architect for the Vanderbilts.

At this time, his love for music, which throughout his career exercised a strong influence over the habits of his mind, was developed, and he was recognized as a keen critic and as a skilled performer on the piano and organ.

In the spring of 1872, strongly prepossessed in favor of the neo-gothic of the time, he went to Chicago, being attracted by the opportunity offered to the profession by the rebuilding of the city after the great fire. Here, together with his friend, Daniel H. Burnham, he spent a year in the employ of Carter, Drake & Wight, and in 1873 the two young men entered into the partnership, which, beginning under the happiest auspices, continued through eighteen years of complete mutual confidence, of high achievement, brilliant enterprise and uninterrupted success.

About the year 1879 he married Mary, the daughter of the late J. M. Walker, but she died within a few weeks after the wedding day. Three years later he married the daughter of Henry S. Monroe, Esq. By this happy union he became the father of three children, and they and his widow survive him.

The peculiar alertness and openness of his mind, his hospitality to every form of intellectual appeal, his wide information, and his quick sympathy with art in all its forms, attracted to him the affectionate interest of the most advanced society of Chicago. He was an active member of its best organizations for the encouragement of literature and art. His clients became his friends, and he had the capacity of so impressing them with his force of character and with the generosity of his zeal in their service, that his work was to an unusual extent relieved from the interference of lay prejudice, and expressed, not a compromise, but the attitude of his mind at the moment of composition. He designed with marvelous rapidity and correctness of touch, reaching his conclusions at a bound. In his office he was the wise counsellor and sympathetic friend of the draftsmen. His recognition by the profession as a leader is evident in the fact that he was the second secretary of the Western Association of Architects, its third president, and for six years a member of its advisory board. Upon the consolidation of the association with the American Institute of Architects, under the latter title, he was appointed to the especially responsible office of secretary, and was reëlected for the second term at the last annual convention.

He was, with universal acceptance, appointed consulting architect of the World's Columbian Exposition of 1893, at Chicago. During the exhausting preliminary labors connected with that vast enterprise, and while the commission of his brother architects, called from distant parts of the country, was in daily personal contact with him in laying out the great buildings of the exposition at Jackson Park, he was stricken with pneumonia, and, after an illness of only four days, he died January 15, 1891, five days after he had completed his forty-first year, leaving a void which cannot be filled. His last conscious utterance called attention to strains of unearthly music which seemed to soothe his listening ears, from some sphere beyond the reach of time.

The work accomplished by the firm during the eighteen years of its existence is, numerically, of almost unprecedented magnitude, and in quality always interesting and scholarly, frequently brilliant and original, very rarely commonplace or merely conventional. It is generally understood that in the division of labor in the firm of Burnham & Root, the latter had charge of the department of design. But Burnham's influence throughout their whole joint career was undoubtedly very great and very salutary, not only as a restraint to exuberance, and as a power of especial sanity and force in the combination, but as an organizer, who made possible the efficient conduct of its large and complicated affairs, and brought its work into sympathy with the practical views of the commercial public.

A list of his works has been taken from the books of the firm, and represents, approximately, the order in which they were executed. These include forty-four structures of a public character, such as office buildings, hotels, churches, apartment buildings, schools, railway stations, etc., in Chicago; twenty-five of the same classes elsewhere; eight buildings to cost from $400,000 to $1,000,000 each, in course of erection, and one hundred and twenty residences of the first-class.*

I cannot review the more important of the many works enumerated without recognizing the fact that they touch, in importance and in quality, the highest points yet attained in the characteristic architecture of the West. Clearly, they differ essentially from any contemporaneous work in other countries, and exemplify, from the earliest to the latest, in their due order, a consistent progress toward some more or less remote point of ideal perfection. But we have yet to discover whether this point is attainable on the lines which he followed. There are fewer indications in this series of the forcing of structure into archæological or academic molds than can be found in any modern European examples of corresponding buildings. Indeed, it seems evident that no architectural form has been imposed upon these monuments, but that their decorative character has, to an unusually large extent, grown out of their conditions of structure and use. At almost every point this healthy development has been protected from extravagance, affectation, caprice or vagaries of invention by a fine spirit of discipline and self-restraint, and by a delicate feeling for purity of

*See complete list on page 91.

line. Like all the other characteristic work of the West, this is based distinctly on romantic, as opposed to classic motifs, and there are few indications in these examples of any aim to conserve the formulas of the schools in the matter of design, though Root had the true spirit of the Renaissance ever in his mind and on his lips. "No lasting success," he said, "comes to an architect who is not grounded in classics. Life is not long enough for one to himself discover those laws of beauty which thousands of years have evolved for architecture."

Root's mind was of studious habit, and though especially subject to artistic emotions and open to a quick appreciation of beautiful form in every style, he rarely suffered the enthusiasm of the moment to betray him into archæological masquerades. With a mind so thoroughly equipped with knowledge of the history of art, and a library so full of the most tempting precedents in other styles, he never fell into the student's error of eclecticism, but remained in all his conspicuous works loyal to that essential spirit and range of progress which had its roots in the archaic romanesque of Southern France, and may have its flower, we venture to hope, in that illimitable country of the West which was a wilderness unknown when the craftsmen of Auvergne were carving the grotesques of the porches of Arles and Trophime eight hundred years ago.

If one were asked to define what constitutes a living art, I am mistaken if he would not recite conditions of practice in design not unlike those which I have outlined in this general view of the work executed under the impulse of this bright intelligence. It had opportunity and temptation to express itself in every mood of versatility, by reason of the incessant demands made upon its resources by the exigencies of a large practice. It would be a miracle indeed if, in this public exposition of an artist's inner life, illustrated by hundreds of buildings of every grade, we did not discover occasional evidences of carelessness and haste, of momentary caprice, of indifference begotten of fatigue, when his genius was off its guard. These evidences no one was so prompt as Root himself to point out and condemn. In the recent article on the architects of Chicago, statements were printed concerning Root similar to these ; his friends were indignant until they found that it was written by Root himself. A recent minister to England cleverly said, in an after-dinner speech, "The man who does not make mistakes very seldom makes anything." But on the whole, Root's enjoyment of his work was so genuine, his resources of mind were so well ordered, his loyalty to his own ideals was so thorough that he was enabled to keep his record incorrupted by vagaries or disloyalties. In the numerous dwelling houses built by the firm we occasionally see excursions into free classic forms, into reminiscences of Flemish-Gothic or of the transitional era of Francis I, as illustrated in the royal chateaux of the Loire ; in some of them we may discover faint reflections of the caprice of the hour, which, before the national architecture had been corrected and put in the line of national development by men of education, had tyrannized over the architectural expressions of the whole country. There is also evident in these minor buildings an occasional straining for novelty at the expense of that secure repose which is indicative of an art confirmed and established, as opposed to an art experimental and progressive. Nowhere, so far as I am aware, did Root give clear evidence of his love for the classic formulas, though the spirit of order and discipline, and the chastisement of refinement, which are the direct result of classic training and which can scarcely be obtained by any other process, are patent in all his works.

Aberrations from purity of type, expressions of personal moods, occasional absence of discipline, experiments in form and in the sentiment and application of ornament, such as I have indicated, are in themselves unavoidable incidents of a condition of vigorous progress and signs of a living art. It advances by errors. If these errors are suffered to bear fruit and to multiply, if they are permitted to create side issues, and to encourage caprices of invention so that the fundamental architectural unit is at length masked by conceits, the art is not advancing, but groping in the dark, and there is no health in it; but if they are dropped as soon as they are found to be destructive or unessential and to interfere with the purity of type, they are a part of progress.

The series of important buildings executed by Burnham & Root from 1880 to 1891, from the Calumet Club to the Temple of the Women's Christian Union at Chicago, or the Mills Building of San Francisco, show a succession of experiments in form, mainly resting on a consistent Romanesque basis. It is easy to see which of these experiments were thrown aside in subsequent buildings as contributing no desirable element to the progressive power of the style, and which of them were retained and amalgamated, so that their accretions were gradually leading the style out of its condition of mere archæological correctness into one elastic to all the new and strange conditions of structure, material and occupation. By reason of the very intelligent and spirited manner in which Root improved his vast opportunities, by reason of the serious way in which he attacked these more monumental problems, thoroughly realizing his responsibilities to art, it was his fortune to contribute to the development of this great Americo-Romanesque experiment nearly or quite as much as Richardson did. The latter introduced the revival, and, through the unexampled vigor of his personality, had already led it on to an interesting point of development, when his career was interrupted by death; the former carried it still further toward the point of its establishment as the characteristic architectural expression of American civilization. The latter conferred upon it power, the former, variety, and both, with their trained coadjutors in the profession, have already proved that the experiment is not merely a revival, barren of results, like the neo-gothic, the free classic or Queen Anne, and other numerous English trials, but the introduction and probable acclimatization of a *basis of design*, established upon Romanesque round-arched elements, which elements had never been carried to perfection, and were, consequently, capable of progression. It seems to have been nearly proved that, in the hands of such men as Root, upon this basis can be built an elastic system, capable of expressing any degree of strength or lightness, simplicity or complexity, force or refinement. It has also been proved, largely by his efforts, that the maintenance of the essential principles of the style does not depend upon the preservation of its peculiar original archaic character in structure or ornament, but that it can amalgamate elements from classic, gothic, Saracenic, or even Indian sources without being diverted from its strong natural growth, and that it is capable of a variety of expression and application which makes it adjustable to the most exacting requirements of that civilization which it is our duty to express.

A careful comparative analysis of the qualities exhibited in Root's first and last more important designs, with a glance at a few intermediate buildings, will serve to illustrate how a trained intelligence in active sympathy with the spirit of his times and loyal to a leading motive of composition, progresses with the progress of general civilization, and creates an art, which is not an exotic but ultimately a flower of our native fields. This analysis will further show that this flower is not an invention but a growth, having its roots in fundamental principles illustrated by historic forms, but varied in the process of development by new conditions of society, material and methods. To this process the persistence and force of one or two strong personalities seems to be absolutely essential. Such plants will become noxious weeds unless subjected to careful culture.

I think no such growth can be detected in any other modern phase of architectural thought either here or abroad. It is high time that it should be recognized, and that the man should be duly honored who, together with the lamented Richardson, availed himself of great opportunities to develop a definite architectural system by processes so logical and reasonable as to bring it within the range of public sympathy and appreciation. Indeed, it seems hardly too much to say that those two men have created a public for architecture.

Among the earliest important works of Burnham & Root, which attracted public attention, are the Grannis, Montauk, Calumet and Insurance Exchange office buildings. In the last named, which of the four seems to have had the most extensive influence over architectural thought in the West, we have a composition of ten stories forced into five for the sake of establishing a harmonic proportion of horizontal divisions. Of these five architectural stories, the first is a basement of two floors with round arched windows; the second, of two floors, is a colonnade of pilasters; the third, of only one floor, is occupied by a row of low segmentally arched windows; the fourth and most important, inclosing four floors, is an arcade with long pilasters, and the fifth, of one story, is a frieze of closely grouped arched windows. The scheme of design is simple, effective and easily understood, and the Romanesque element is plainly confessed. The distribution of ornament is temperate and its archaism is chastened with somewhat of Renaissance feeling. The skyline is accentuated with a round tourette at the two corners. The porch is composed of a low entrance arch, flanked by two round tourettes, corbelled out above the impost line, nearly detached from the wall, with conical finials, and connected by a corbelled balcony as a cornice, the whole inclosing two rows of windows continuous with the order of the second architectural story. This porch has been frequently imitated. The façades are of brick and terra-cotta construction; the spandrels of the basement story are decorated with quiet diapers of terra-cotta, and those of the upper arcade with marked horizontal lines composed of alternately recessed brick courses which are continued in the

frieze above and assist the main cornice of brick corbels in adequately crowning the edifice. The vertical divisions by piers are distinctly subordinated to the horizontal divisions above described. These horizontal divisions are separated by four small string courses, which are carried around the façades continuously. The whole composition is distinguished by great reserve, and many of the experiments tried in it were repeated in subsequent buildings of the firm. To me its most pleasing feature is the interjection of the low story of single windows in the middle, by which there is obtained a strong harmonic or musical contrast with the lofty stories above and below. To the absence or presence of this agreeable feature of proportion by contrast in subsequent works is to be attributed not a little of their failure or success respectively.

The new Calumet Club House, which preceded this building, is less marked as an example of style and far more conventional in general character. We miss in it the simplicity of general outline and the reserved force which Root afterward obtained. The design is crowded and busy with detail, and the skyline is worried without obtaining a satisfactory result of picturesqueness. The building, of course, has some good detail, but it seems to have had no apparent influence over Root's subsequent work. It is a significant mile-stone in his career.

The competitive design for the Cincinnati Chamber of Commerce and the executed design for the Art Institute of Chicago belong approximately to the same era as the Insurance Exchange. The former is an emphatic break from the Romanesque succession, and indicates a mood rather than a conviction. It presents a clever study, in the contemporary English manner, of a mediæval Flemish town hall, with a lofty hipped roof, corner towers with steep conical spires, dormers fantastically crowned with capricious, flamboyant open pediments; it has the carved balconies, the original canopies, and all the other picturesque features of the Low Countries in the fifteenth century, except their chimneys, which, strangely, are not apparent in this design. The design is interesting as an exotic. Many of its features made their appearance afterward in Root's domestic work, but it had no value whatever in the work of establishing the architectural system which was the greatest result of his more serious efforts. The Art Institute, however, takes up the thread of consistent progress much more effectively, and is one of the most successful works of this period of study.

In the Rialto Building, constructed in 1886, we have a design in which the vertical elements are much more strongly accentuated than in any previous trials. Very properly, most of its characteristic features were never repeated. It was a useful lesson. It has three architectural stories, of which the first and second inclose two floors each, and the third four floors. The pilasters or piers in the last story have the expression of buttresses, and their vertical lines are somewhat coarsely interrupted at the top by heavy balconies, which serve as the main cornice, above which is a final attic story through which the pier-lines break and form clumsy pinnacles against the sky.

The office building of the Central Safety Deposit Company, otherwise known as The Rookery, built about 1886, marks another step of progress, with far more adventurous detail. In this we feel the absence of subordination and repose. It was a large field for experiment in Romanesque detail used with an amount of intrepidity which commands respect. Horizontal and vertical divisions have nearly equal value—a fatal error in an architectural composition. There is an immense deal of successful and beautiful invention in these crowded façades, of which much found its way into Root's later, better and more temperate work. The position of this building in the succession shows, I think, into what a state of feverish energy his powers were then stirred, and how large were his resources. Though perhaps the least successful of his more important works, it is one of the most interesting and suggestive.

By this time the organization and training of Burnham & Root's office force must have converted it into an orchestra controlled by a powerful but not tyrannical spirit. In no other way can we account for the immense amount of studious and thoughtful work accomplished at this period. "The Rookery" is not only a noted example of great fertility of design, but there is nothing bolder, more original or more inspiring in modern civic architecture either here or elsewhere than its glass-covered court. Where the work has been committed to such a multitude of new devices in construction and to such a prodigality of invention in ornament, it is not strange that one may find reasonable objection to certain points of detail. One may admire the audacity of the double iron staircase which, supported by ingenious cantilevers, ramps with double curvature out into open space, meeting at a landing in the sky, as it were, from which the straight second run rises soberly backward to the stories above. One may admire this and wonder whether such an obvious *tours de force* is worth the study which must have been bestowed upon it. Even the imaginative prison visions in the famous etchings of Piranesi, with their aerial ladders and impossible galleries, present nothing more audacious.

The American Bank Building and the Exchange Building of Kansas City, which belonged to '87 and '88, fall into the line of steady and wholesome progress. Their fenestration is ample, but they have every desirable quality of refined repose. In these brick structures are emphasized several features which have had great influence over the style. Decorative terra-cotta is built into the brick surface, forming a part of it, with excellent and appropriate effect, and the rounding of the pier angles in brickwork is used with good judgment. The harmonious proportions of both buildings is masterly, and in the high stories the iron mullions, enveloped in brick fireproofing and forming slender colonettes, form a fine note of contrast with the corresponding massive brick pier-jambs. The flat segmental bays, which resulted from the experiment in "The Rookery" building at Chicago, are here used with infinitely greater elegance and success, and the scheme of ornament, largely infused with Saracenic spirit, shows how hospitably the growing style receives such accretions, which enlarge its resources without affecting its essential qualities of dignity and strength. These are beautiful buildings.

The Phenix Building of Chicago strikes another note of variation. Its harmonic horizontal divisions would have been perfect but for the treatment of the attic story, which is placed above the balconied cornice, and overweights the building at the top. The experiment in oriels, of which the vertical members are heavy, round, decorated columns forming the angles, three to each bay, will never be tried again. There is also introduced into this building, with curious and not uninteresting effect, a certain amount of richly carved detail, which would never have been invented in America but for the copious suggestions in certain of the barbaric topes and Buddhist temples of India. The porch of this building is of noble and interesting design.

The current works of Root—momentarily interrupted by the inexplicable providence of his death, but sure to be fruitful in the future, through the spirit which he left behind him and which cannot die—show advances so distinct in all the elements of wholesome growth; they show a mind so capacious and so facile; a spirit which so happily combined conservatism with audacity; a power of progression so marked, that his sudden taking off becomes doubly pathetic, and almost assumes the proportions of a disaster to our beloved art. At all events, in him we have lost a Hotspur, whose gallant example kept the Lamp of Life blazing like a beacon.

The eighteen-storied tower of the Masonic Temple of Chicago, now erecting, is an extreme example of the daring quality of his genius; of his wise conservatism, the great structure now constructing under the auspices of the Woman's Christian Temperance Union of Chicago, and the Mills Building of San Francisco, may stand as final and triumphant witnesses. The former is a departure so fundamental from the traditions of decorative architecture that I hardly know how to characterize it. It is a building absolutely committed to what one may call a perpendicular tyranny of pilasters, resting upon an inadequate open stylobate, and supporting two severe gables, connected by a steep roof and broken by dormers. Thirteen stories of similar use and importance, typical of an industrial hive of democratic industry, find themselves expressed here externally in an absolutely monotonous and unmitigated system of fenestration, separated by vertical piers which rise from top to bottom without incident. It is perhaps the frankest admission of a structural and economical necessity ever expressed in architectural form. Between these pilasters, 160 feet high, rise several oriels equally vertical and equally monotonous. For the interruption of these vertical lines there would be of course only the excuse of design; none are supplied either by structure or use. It is probable that in this experiment, which looks like the apotheosis of the elevator in the modern social system, it was Root's desire to permit an exceptional character of structure to have the fullest and most honest architectural expression once for all. But, as Mr. Fergusson would say, one cannot but wonder why, under this conviction of duty, the stylobate was not made more massive and more evidently capable of the vast labor intrusted to it by the structural conditions above, and why, instead of connecting his pilasters together at the top by arches, he did not finish them with offsets like buttresses, treating the structure above like a group of lanterns recessed behind aerial galleries, the skyline being broken with pinnacles, dormers, gables and chimneys, following the suggestions contained in such spires as Ulm and Freiburg. Doubtless Root could have defended this composition with eloquence which would fascinate, while it might not convince; we are sure that

it was not a caprice, for this would be contrary to the serious habit of his mind when engaged with problems of such magnitude. But his lips are sealed, and we must await with curiosity such revelations and condonations as may be supplied by the total effect in execution.

As for the temple erecting for the Woman's Christian Union, it is a design far more orderly and sane; a vast building in two lofty pavilions, with an open recessed court between, closed at the bottom by a curtain wall continuous with the two-storied stylobate, in which is the main entrance. Architecturally the building is committed to the style of chateaux of the Loire before they had been greatly affected by the Renaissance. The group has twelve stories, two of which are in the stylobate, seven in the walls which arise thence to the machicolated cornice, and three in the battlements and dormers above.

The angles of the pavilions are mighty, round towers engaged in the corners, starting from corbels in the stylobate, finishing with an attic or battlement story above the cornice and crowned with conical roofs. Between are two-storied dormers with steep gables, grouped with noble effect, and the masses of the building behind are carried boldly to the sky with hipped roofs. There is a light and slender but adequate lantern in the center. The skylines of this design are beyond all praise. The serious and noble quality of the building is due to the underlying Romanesque sentiment, which, though not expressed technically, has to my mind clearly served to eliminate the luxury and gaity which distinguished its prototypes, the royal chateaux of France. It is true that the Romanesque roof is nearly lost in the late gothic expression into which it has flowered, while in the Masonic experiment it is much more frankly retained. Between the two one cannot but admit that the gothic device is far more architectural as the crown for a building composed of the superimposition of numerous equal stories. I think it will be generally admitted that this last adaptation of architecture to structure, or, more properly, this growth of architecture from structure on a heroic scale, is, on the whole, the finest effort of Root's genius. As an expression of strength and dignity crowned worthily by beauty and grace, no nobler example has been given in modern times.

"Great men," said Longfellow, "stand like towers in the city of God." Perhaps the architectural treatment of these structures of unprecedented height, illustrating at once the loftiness of his aspirations, the delicate sensitiveness of his genius, and his high sense of professional duty in preserving for us to the last through many experiments a single consistent basis of design, may be accepted as a fitting expression of one who seems to me to have been one of the most interesting personalities in the history of modern architecture.

## John W. Root as a Draftsman.

IN answer to a request to give a short sketch of Mr. Root's life as a draftsman in the period between his arrival in New York and his copartnership with Mr. Burnham, Mr. P. B. Wight contributes the following:

*Editors Inland Architect:*

In answer to your request that I give you, at short notice, any reminiscences of the late Mr. Root of which I may be possessed, I can only mention the following:

My first acquaintance with him was when he called at my office in New York in the latter part of 1871. He told me that he had attended about three years in the Academic department of the University of New York, and had been about six months in the office of J. B. Snook and the same time in the office of James Renwick, both New York architects. I had a great desire to take him into my office, for he showed me original designs which were entirely in harmony with my ideas of the proper conception of architecture as a fine art, and they were like the designs of a mature scholar. But I had very little to do at that time and did not need assistance.

After my visit to Chicago to see the ruins after the great fire, at which time I had decided to join the firm of Carter & Drake, of this city, I asked him to call at my office in New York, which he did, and then told him I would send for him as soon as there should be an opening. He then showed me sketches he had already made for Reed's Temple of Music in Chicago, and had a great desire to go West, though he did not feel confident to attempt to practice after such a short experience as a draftsman.

I came to Chicago and sent for him in January, 1872. When he came he was made foreman of the office, in which place he remained until the formation of the firm of Burnham & Root about a year later. Mr. Burnham was employed by us during that time, and there they made their acquaintance. Our firm consented that Mr. Root should carry out his design for the Reeds, but they abandoned his artistic design for the exterior and only built a plain two-story structure. While with us Mr. Root designed the front of one building, without prompting on my part, and it was erected at 24 Lake street. As it is a matter of interest just now, this may be called his first executed architectural design.

Mr. Root was essentially a self-taught man, possessed in his youth of the greatest acquisitiveness I have ever witnessed. His experience in the offices of New York architects cannot be considered in the light of an education, for his early designs showed no evidences of the influence of those he had been with. While the general disposition is to praise the excellence of his designs, I am of the opinion that he was equally an expert in construction and design. I can recall an instance when, at the time that I was employed as consulting architect in conjunction with Burnham & Root in the construction of the Montauk block, he was quick to detect an error I had made in the computation of the weight of one of the front piers. That building, by the way, was the first in which railroad iron was used in the foundations.

I consider that the great excellence in Mr. Root's designs was due to the fact that he was quick in seizing on the capacity of all building materials for architectural expression; that he designed for the materials, and did not have to find materials for carrying out his designs. He was in this a thorough exponent of the principles of Viollet-le-Duc. It was the key note of his great versatility in design. He sought to make everything he touched beautiful rather than architectural. His works have done more than those of any other man to free us from the architecture of the schools and give us an architecture of perfect freedom. But this freedom never led to license, as has been the case with others who did not possess the self-discipline which he practiced, which was all the more necessary in one possessed of such an active imagination. His works have demonstrated, not that we can develop an American style of architecture, but that the best architecture of the nineteenth century is not trammeled by precedents; that the best works of past ages are models for study only, and not for repetition; and that if we only grasp the knowledge of the best architecture of other days, seize upon the capacities of the materials of today and mold them into things of beauty, we will develop an architecture worthy to be associated with the other arts of the nineteenth century.

He has shown that we can have good, true and beautiful architecture without style. In this he was unlike the late Mr. Richardson, in that the latter took an old style and Americanized it. But Mr. Root has done more for architecture than Richardson did. Richardson's early work was crude and it was some time before he fell into the line of thought which brought him his great fame. Root was consistent in his ideas from the time that he first put pencil to paper, and continued to develop them to the end. We would not have seen this had he graduated from an architectural school, for he would have been too much trammeled by precedents, as Richardson was until he emancipated himself. Both were great men, and only great men could have done what they have.

CHICAGO, January 21, 1891. P. B. WIGHT.

## Circumstances Attending the Death of John W. Root.

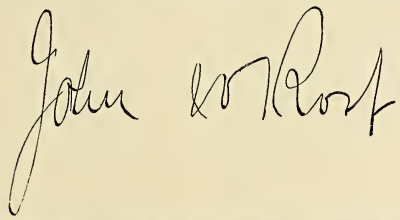
LATE in the afternoon of the last day of the year 1890 the writer found Mr. Root in his office preparing to go to New York on the following day. All the employés had gone and he was alone and looked tired and overworked. He said he was tired and felt inclined to resign the secretaryship of the Institute. This was alarming, as he had never been heard to complain of too much work, and while it only indicated extreme physical exhaustion and before he went home he became cheerful and hopeful again, it has its significance in the light of subsequent events.

On the afternoon of New Year's day Mr. Root went to New York. His plan was to attend the meeting of the board of directors of the Institute on the 3d, attend to some business relating to the World's Fair, and to leave on the 5th for Atlanta, Georgia, to inspect the Equitable building under construction there from his designs, and visit his parents, and return to Chicago on the following Saturday. All of this was carried out as planned, and he arrived at 11 o'clock on Saturday, January 10—his forty-first birthday. The writer met him about 1 o'clock, but all business was deferred until Monday, as he said, "I've got to get out to the house to see how the children are." He was in much the same mood as when he went away, and said he was tired. Mr. Gelert, the sculptor, was anxious for him to visit his studio to inspect some casts, and he promised to call on his way back from home. A friend called, and to entertain him while attending

to some of the many matters that claimed his instant attention, handed him a copy of *America*, with the article written by him reproduced in this number, saying that he wrote it. These were the incidents of his last hour spent at his office. In the evening he attended a dinner given at the University Club to the ten architects on World's Fair work who had just been officially appointed, though their selection had been made before his departure.

On the following (Sunday) evening these architects he entertained at his home, and that evening, his last in health and strength, will long be remembered by those who shared it with him. At 5 o'clock on Monday morning he was taken with a chill, and medical aid being summoned, it was found that he had pneumonia, probably precipitated by a Turkish bath taken the day before, and subsequent exposure, lightly clad, to the evening air.

On Monday evening, at 6 o'clock, the writer called to see him, to, if possible, allay a growing apprehension, and to procure his signature to a charter for the Missouri State Chapter of the American Institute of Architects. He was resting easily, and no serious ending to his sickness was anticipated, and was well enough to affix his signature to the document. This is perhaps his last signature, and



renders this charter invaluable as a memento. It was taken to St. Louis that evening to be presented to the Chapter at its annual meeting the next day. The cut is a reproduction from that signature.

The night of Monday was spent restlessly, and the disease developed rapidly until the end, which occurred at 6 o'clock on Thursday evening, January 15, three days and a half after the first indication of pulmonary affection. His friend Johannes Gelert, the sculptor, took a mask of his face, which will be invaluable to architects and people in the years to come.

## Funeral Service of John W. Root.

TO enter a door that has ever opened with hospitality and good cheer—to stand in rooms where every arrangement and drapery breathes of departed social pleasures or the home-like feeling of the chosen guest, and to realize that all this is as a dream, is one of those impressive experiences that lasts through life.

Mr. Root's funeral was private and only his family and the immediate friends of his manhood and his great joyous life gathered about him to say farewell to all that was left on earth.

Besides his father and mother, his brother, his wife and those three children whom he loved and who loved him, here were gathered friends whose names were noted in the city and nation but whose rank was lost in the presence and the occasion. The mayor of the city, the director-general of the great exposition and members of its committees. Here stood Mr. Codman, of the consulting board, and Mr. Ferry, of Milwaukee, who had come many miles to stand one moment in that presence and depart; those who most had loved him in life gathered speechless and listened to the brief remarks of Bishop Cheney, to which every heart responded, and yet felt the great inadequacy of the words of even that silver-tongued divine to tell the story of his life and character.

In the center of the front drawing-room stood the cedar casket the plate upon which bore the simple inscription:

JOHN WELLBORN ROOT.
BORN JANUARY 10, 1850.
DIED JANUARY 15, 1891.

But none of these details were noted until the service was concluded, and now, though it must be recorded, the memory is indistinct, as then no person or detail was observed, the fact shutting out the impression.

The full burial service of the Episcopal Church was used. The scripture lesson was from first Corinthians, fifteenth chapter, beginning with the twentieth verse. At its close the Root quartette, composed of two sons and two daughters of George F. Root, the composer (not related to him whom they were there to honor), sang Cardinal Newman's beautiful hymn, "Lead, Kindly Light." The singers were not visible and the music of their voices floated out a benediction over the assembly; one voice, clear, strong and flute-like, leading the others as the warble of the thrush is heard above the trill of the song sparrow. The words of that hymn cannot be too often printed.

LEAD, KINDLY LIGHT.

"Lead, kindly light, amid the encircling gloom,
Lead thou me on;
The night is dark, and I am far from home,
Lead thou me on.
Keep thou my feet; I do not ask to see
The distant scene; one step enough for me.

"I was not ever thus, nor pray'd that thou
Shouldst lead me on;
I loved to choose and see my path; but now
Lead thou me on.
I loved the garish day; and, spite of fears,
Pride ruled my will: remember not past years.

"So long thy power has blest me, sure it still
Will lead me on
O'er moor and fen, o'er crag and torrent, till
The night is gone,
And with the morn those angel faces smile,
Which I have loved long since, and lost awhile."

The sermon was brief but impressive. The speaker said it was always sad to see one cut down in the noonday of his life, in the midst of his work. Some fell like the acorn blown from the limb by the passing breeze, and were forgotten as soon as the grass began to grow upon their graves. Others there were who were like the oak itself, whose roots extend deep into the earth and outward in every direction, and whose branches were so interwoven with the boughs of the surrounding forest, that it could not fall without lacerating and injuring its neighbors. If Mr. Root had one attribute that transcended all others, more than his great capacity for work, it was that rare gift, which for want of a better name is called executive ability, the power of putting others at work and directing their efforts effectively. Next marked was the symmetry of his character. He was not only a leader in his chosen profession, but a ripe scholar, a man of finest education, a musician of high attainments, and of the highest social graces. The steadfast pursuit of his profession, continuous and absorbing as it was, did not warp his nature, or leave it undeveloped on its other sides. Of the warmth of his friendship it was unnecessary to speak. He was the kindest of fathers, the tenderest of husbands. He was beloved by all who knew him. When one is taken away thus suddenly, the question is often asked of the minister of the gospel why it was. This is a question no honest minister could answer. It is not given to him, any more than those outside of the ministry, to fathom the purposes of the Almighty. All that can be known is that it was God's will. The sermon closed with an allusion to days of leisure spent by the speaker with him at the seashore, where he learned to know him, and closed with an impressive invocation. The quartette then sang the beautiful "Hymn of the Homeland."

THE HOMELAND.

"The homeland, the homeland; the land of the freeborn;
There is no night in the homeland, but aye the fadeless morn;
I'm sighing for the homeland, my heart is aching here;
There is no pain in the homeland to which I'm drawing near.

"My Lord is in the homeland, with angels bright and fair;
There is no sin in the homeland, and no temptation there;
The music of the homeland is ringing in my ears,
And when I think of the homeland my eyes gush out with tears.

"For those I love in the homeland are calling me away
To rest and peace in the homeland, and life beyond decay;
There's no death in the homeland, there's no sorrow above;
Christ brings us all to the homeland of his eternal love."

The bishop pronounced the benediction. Friends moved forward to take a last look upon that face that, ever responsive to each friendly glance, was responsive no more. Natural as in life, a bunch of marguerites in the hand that had laid down the pencil that drew for earth for the flowers that bloom for heaven, a *boutonnière* of English violets on his breast, his face bearing few traces of the dread struggle that ended that noble life, he looked as he looked but once in life, when he stood in the group of his confrères on the steps of the treasury at Washington for that now historical photograph by Brady. At the head of the casket stood a tall column of flowers, sent by Mr. Root's draftsmen; upon the casket rested a wreath of laurel; and as he was borne to his last resting place a bunch of graceful palms, tied with a ribbon bearing the legend, "Illinois Chapter American Institute of Architects," rested upon the casket. The pallbearers were D. H. Burnham, John Meigs Ewen, C. G. Fuller, Charles C.

Curtis, William Pretyman and C. L. Hutchinson; and when the casket was sealed they bore it from that home he loved so much and had made so lovely to the beautiful cemetery at Graceland, where the burial service was read by the Reverend Mr. Tuckerman, of St. James church.

## In Memory of John W. Root.

SOME of the resolutions of regret that have been passed by not only every society with which Mr. Root had connection, but many whose relations were of an entirely personal character, are given below, the most remarkable of which are those passed upon the evening of his death by the Oriental Consistory of the Masonic fraternity, which was assembled in triennial conclave when the death of Mr. Root was announced. This is said to be the only instance in Masonic history when such an honor has been conferred upon a non-member. They are as follows:

*Resolved*, That the members of the Oriental Consistory in triennial conclave have learned with profound regret of the sudden death of Mr. John W. Root, and join with our citizens generally in the deep sorrow felt at the loss of this prominent citizen, whose personal worth and professional skill brought him in close contact with this ancient fraternity as the designer of the great Masonic Temple, the erection of which had so auspiciously begun under the direction of his master mind.

*Resolved*, That the kindliest sympathy of the Ancient and Accepted Scottish Rite is tendered his bereaved family and mourning friends.

JOHN C. SMITH, 33d°.
NORMAN T. GASSETTE, 33d°.
DE WITT C. CREGIER, 33d°.

The different bodies with which Mr. Root was associated as consulting architect of the Columbian Exposition each passed resolutions, the Board of Directors having two copies of the following engrossed and sent to Mr. Root's family and to his partner, Mr. Burnham:

WHEREAS, John Wellborn Root, consulting architect of the World's Columbian Exposition, has suddenly been taken from us in the complete vigor of his powers and in the full activity of his great genius;

*Resolved*, That we, the directors of the World's Columbian Exposition, feel that the public has been deprived of one of the greatest of American architects; that the profession to which he belonged has been bereft of one of its brightest ornaments, and that the World's Columbian Exposition has lost the inestimable services of one who, chosen unanimously for the highest position in its power to give, conceived and formulated the general plans for its grounds and buildings with consummate artistic genius, with great executive skill, and with unfaltering and unselfish devotion to duty.

That we mourn the loss of an associate and guide in the great work before us, who, by his manly and gentle character, his generosity and unselfishness, and his brilliant social qualities, had endeared himself to each and all of us; and further,

*Resolved*, That these resolutions be spread upon the records, and that copies thereof be forwarded to his family and to Mr. D. H. Burnham, late his partner, with expression of our deepest and most heartfelt sympathy in their bereavement.

Another testimonial of esteem was rendered by the Committee on Buildings and Grounds, at a special meeting of the committee, as follows:

John Wellborn Root, late consulting architect of the World's Columbian Exposition, is dead. A week ago he was with us in perfect health and in the prime and vigor of a splendid manhood. Today he is in his grave.

The suddenness of his death brings a quick and unexpected burden of grief to us all. With deep and sincere sorrow we deplore this great loss not only to his family and friends but to Chicago, and, indeed, to the whole country; the loss not only of a man of bright social qualities, genial and attractive to all, and especially endearing to those who knew him best, but of one of the most gifted and promising men in the profession in America.

Possessing high genius, exquisite taste and a genuine love for all that is true and beautiful in art, we had looked to him confidently to select with masterly skill the best designs and suggestions presented to us, for the style and arrangement of the many large buildings to be selected by us, combining them with such architectural appropriateness and taste as to produce a complete aggregation of beauty, harmony and grandeur of construction such as we could present with confidence and pride to the criticism of the world.

But the quick intellect, the skilled, unerring judgment of this architect and designer are lost to us forever. It will be difficult, if indeed possible, to fill his place.

*Resolved*, That we tender to his bereaved family and to D. H. Burnham, late his partner, our profound and heartfelt sympathy.

E. T. JEFFERY, C. H. SCHWAB,
LYMAN J. GAGE, E. S. PIKE,
R. A. WALLER, D. C. CREGIER,
O. F. ALDIS, GEORGE R. DAVIS.

The lady managers residing in Chicago passed the following resolutions on behalf of the board they represent:

WHEREAS, The late Mr. John W. Root was an earnest and ardent friend of the Board of Lady Managers of the World's Columbian Commission and rendered distinguished assistance in aid of the proposed plans for the Administration Building of the coming exposition; and

WHEREAS, His short life of forty years was distinguished by unusual ability, marked genius and sterling integrity; therefore

*Resolved*, That we, the Chicago residents of the board, in common with the people of Chicago, feel that in his death the public has suffered a lamentable loss; and we desire to add our testimonial to his worth, and to express to his family our sincere sympathy in their great and irreparable bereavement.

*Resolved, further*, That these resolutions be spread upon the minutes of the board and a copy of them forwarded by the secretary to the family of the deceased.

MRS. LEANDER STONE, } Committee.
MRS. G. L. DUNLAP, }

At a session of the ten architects comprising the Bureau of Architects on the World's Fair buildings, the following resolutions were passed unanimously by a rising vote and sent to Mr. Burnham and the Committee on Buildings and Grounds. The resolutions were written by Mr. Van Brunt and Mr. Olmsted:

WHEREAS, The commission of architects and its colleagues, summoned from the various parts of the United States to study the problem of the design of the buildings for the World's Columbian Exposition, are, at the outset of their difficult labors, met by calamity in the death of John Wellborn Root, the consulting architect of the exposition; therefore,

*Resolved*, That we, his professional brothers and friends, formally put upon record our sense of professional and personal loss in the unexpected catastrophe; professional, because his vigorous genius, his well-trained intellect and his large artistic resources were doing unusual service in advancing the architecture of our country; personal, because his genial and generous disposition had warmly commended him to our affections.

*Resolved*, That we offer to his family our heartfelt condolence, and to his partner, our friend D. H. Burnham, our warmest expression of sympathy for the sudden breaking off of a mutual alliance of mind and heart which has proved productive of large results in the past, and which was full of the brightest prospects for the future.

*Resolved*, That to the public in a national sense is due our testimony that in this event a loss has occurred which can hardly be remedied.

R. M. HUNT, HENRY S. CODMAN,
GEORGE B. POST, BURLING & WHITEHOUSE,
VAN BRUNT & HOWE, By Edward Burling.
By Henry Van Brunt. W. L. B. JENNEY,
MCKIM, MEAD & WHITE, S. S. BEMAN,
By William Rutherford Mead. ADLER & SULLIVAN,
PEABODY & STEARNS, By Louis H. Sullivan.
By Robert S. Peabody. HENRY IVES COBB,
FREDERICK L. OLMSTED, A. GOTTLIEB.

Among the architectural associations that have passed resolutions the following have been received from the Illinois Chapter and the Michigan Chapter, American Institute of Architects:

The Michigan State Association of Architects have passed the following:

DETROIT, Mich., January 17, 1891.

The Micbigan Chapter of the American Institute of Architects, in special session, beld this day, desire to place on record our sense of the great loss to the architectural profession and to the American Institute of Architects in the death of Mr. John W. Root, to pay our tribute to his high professional attainments and to express our profound sympathy to his family and associates.

ZACH RICE, Secretary. GORDON W. LLOYD, President.

At the regular meeting of the Illinois Chapter, January 18, the following was passed and will be signed by every member of the Chapter:

ROOMS OF THE ILLINOIS CHAPTER, A. I. A., 63-65 WASHINGTON STREET.

CHICAGO, January 20, 1891.

Our honored friend and fellow, John Wellborn Root, is no more. His genial goodfellowship, his incisive participation in our proceedings, his sound judgment, his fund of valuable information and bis keen wit will no more enrich our meetings, but yet will linger in our memories.

In him our profession has lost a valued and brilliant member and our community a most promising and useful citizen.

That his children may know, when they grow to manhood and womanhood, that their father was highly esteemed by his fellows and contemporaries, we, the members of the Illinois Chapter of the American Institute of Architects, have caused the above to be written, and have affixed our individual signatures and our corporate seal. S. V. SHIPMAN, President.

GEORGE BEAUMONT, Secretary.

Perhaps no organization of men felt the death of Mr. Root more generally than those who are members of the Chicago Builders' and Traders' Exchange. They, so intimately connected with the execution of his greatest works, were always inspired by his enthusiasm, charmed by his friendliness and instant recognition of their rights. Always alive to the limitations and qualities of a material or a method, they were always ready to second his efforts to completely fill the requirements of his designs. Their expression, voiced at the annual meeting, was brief, and took action in the form of the following resolution:

With feelings of sorrow and regret have we heard of Chicago's great loss by the death of John W. Root. We are deprived of a talented architect, a brilliant designer, a thorough student, and a genial gentleman, and the Builders' and Traders' Exchange does hereby give expression to its grief and sympathy with the bereaved. W. P. KETCHUM, President.

JAMES JOHN, Secretary.

ARCHITECTS TREAT & FOLTZ, of Chicago, wish to announce that they have removed to their new offices in the Fairbanks building, on the northeast corner of Wabash avenue and Randolph street. This is also the address of the treasurer of the American Institute of Architects.

## Buildings Designed by John W. Root.

WHILE the firm of Burnham & Root has been in existence for eighteen years, the larger mass of work executed by the firm and designed by Mr. Root has been done in the past twelve years, and it is fitting to place upon record the principal work accomplished up to the date of his death.

PUBLIC STRUCTURES IN CHICAGO.

Union Stock-Yards Building.
Abstract Building.
Brooks Building.
Bournique's Academy.
Calumet Club House.
Montauk Block.
Calumet Building.
Commerce Building.
Fidelity Bank Building.
Graham School, Town of Lake.
Illinois Bank Building.
Lincoln Park Sanitarium.
Marquette Block.
Michigan Avenue Hotel.
Northwestern Safe and Trust Company Building.
Sixty-first Street Public School.
Swimming Academy.
C. B. & Q. Office Building.
Rialto.
Trader's Building.
Art Institute.
Academy of Fine Arts.
A. T. & S. F. Office Building.
Byrne Block.
Church of the Covenant.
Wittington School, Evanston.
Forty-third Street Public School.
Haymarket Monument Pedestal.
Insurance Exchange Building.
Lake View Church.
Grannis Block.
McCormick Warehouse.
McConnell Building.
Phenix Building.
The Rookery.
Rand-McNally Block.
Pickwick Apartment Building.
St. Lukes Hospital.
Garfield Park Casino.

PUBLIC STRUCTURES IN OTHER CITIES.

Society for Savings Building, Cleveland, Ohio.
Midland Hotel, Kansas City.
Exchange Building (Board of Trade), Kansas City.
Buena Church and Station, Buena Park.
Chronicle Building, San Francisco.
Depot, Des Moines, Iowa.
Guaymas Hotel, Mexico.
Courthouse and jail, Kenosha, Wis.
Milwaukee Clubhouse, Milwaukee.
Peoria Bank, Peoria.
Panorama of Gettysburg, Pittsburgh, Pa.
Tipton Bank, Tipton, Ind.
The Atchison Bank Building, Atchison, Kan.
American National Bank Building, Kansas City.
Grand Avenue Depot, Kansas City.
Y. M. C. A. Building, Kansas City.
Public Library, Creston, Iowa.
Depot, Clinton, Iowa.
Depot, Fort Scott, Kan.
Union Depot, Galesburg.
Station, Kewanee.
Montezuma Hotel, Las Vegas, New Mexico.
Railway Station, Ottumwa, Iowa.
Chamber of Commerce (rebuilt), Peoria.
Sanitarium, Lake Geneva.

APARTMENT HOUSES IN CHICAGO.

Charles L. Hutchinson, residence and flats.
B. Sturges, residence and flats.
Kensington Flats.
Argyle Flats.
Walker Flats.
Waller Flats.

RESIDENCES IN CHICAGO AND ELSEWHERE

E. W. Wilson,
L. G. Wheeler,
Mrs. Wright,
C. C. Thompson,
A. A. Sprague,
J. N. W. Sherman,
W. Pretyman,
N. B. Ream,
A. J. Leith,
E. W. Morley,
Charles Hamill,
M. C. Jones,
Samuel Fargo,
A. Grossman,
S. Coleman,
Charles Counselman,
G. B. Baldwin,
C. W. Fullerton,
Arthur J. Caton,
A. Byram,
C. L. Allen,
J. H. Winterbotham,
Mrs. Whitfield,
J. R. True,
M. P. Smith,
C. W. Needham,
J. C. Pennoyer,
P. W. Raber,
H. W. Leith,
Dr. J. S. Mitchell,
W. E. Hale,
O. R. Keith,
Henry Field,
Rev. J. Goddard,
J. M. Chase,
J. W. Brooks,
George S. Lauret,
H. A. Huntington,
S. E. Egan,
W. I. Cobb,
R. A. Waller,
E. C. Waller,
General Torrence,
A. L. Thomas,
Lot Smith,
J. H. Nolan,
H. J. Peet,
P. J. Kaspar,
J. H. Leidig,
D. W. Mills,
D. K. Hill,
S. A. Kent,
James Frank,
J. H. Dow,
James Charnley,
A. Brosseau,
W. D. Walker,
Owen F. Aldis
H. H. Shufeldt,
E. E. Ayer,
O. D. Wetherell,
H. Willard,
E. H. Valentine,
V. C. Turner,
V. Sands,
J. F. Parker,
O. W. Potter,
E. Ledger,
L. Maxwell,
George E. Marshall,
George V. Hankins,
C. Frost,
Thomas Dent,
H. A. Davis,
C. C. Collins,
W. Barker,
J. C. Black,
Arthur Bingham,
James Sayers,
C. E. Baker,
H. R. Wilson,
A. L. Warner,
Mrs. W. H. Woodyatt,
M. C. Stearns,
A. H. Sellers,
J. H Pearson,
A. M. Reeves,
Thomas Land,
L. B. Mitchell,
E. K. Morrill,
John Hough,
Dr. C. G. Fuller,
S. E. Gross,
C. B. Carter,
O. W. Clapp,
Dr. M. L. Burnham,
H. W. Renn,
A. J. Kirkwood,
G. H. Wheeler,
P. Templeton,
E. Sturtevant,
George Scott,
Robert Patterson,
J. W. Root,
J. A. Lynch,
Max A. Meyer,
J. J. Hoch,
S. W. Jacobs,
E. M. Fuller,
R. C. Graves,
Elliott Callender,
W. G. Coolridge,
Thomas R. Burch,
P. V. Kellogg,
L. J. Lombard, Kansas City,
W. C. Scarritt, Kansas City,
J. Whittaker, St. Louis,
M. M. Farr, St. Louis.

PUBLIC STRUCTURES IN COURSE OF ERECTION.

Masonic Temple.
Chicago Hotel.
D. O. Mills Block, San Francisco.
Chronicle Building, San Francisco.
Woman's Temple.
Monadnock Block.
Chicago Herald Building.
First Regiment Armory.

## Architects of Chicago.

THE last article for public print written by Mr. Root was a contribution upon the architects of Chicago for *America*, a Chicago literary and political weekly, and published anonymously in a "special holiday number" credited to "a prominent architect." Not alone because it is his latest article is it here reproduced, but because it shows a phase of character which is almost as uncommon as the genius that was his, an ability to impartially criticise the works of others; and because it gives his estimate of his own work as none other could. Written in the same "haste of the hour" to which he says his designs were too often subject, it has a gentle, thoughtful and incisive force that much study could hardly have improved, and it now stands as a graceful tribute to his fellow architects.

Some of our older citizens still refer to certain monumental grandeur which existed "before the fire"—which, in Chicago, means what "in the beginning" means in the Scriptures. Crosby's Opera House is a case in point; a building, an audience room beside which, in the memory of the old citizen, the new Auditorium pales its fires. That there was much which was creditable cannot be doubted, for men who had designed old Chicago designed, in the years immediately after the fire, much of new Chicago.

The crudity and self-assertion, the fondness for cheap ornament which always marks the architecture of new and ambitious towns, were characteristic of earlier Chicago work. But we cannot withhold our admiration from the men who, under the tremendous pressure of rebuilding, from October, 1871 to 1873, stood so well between us and architectural abominations.

Taken as a whole, Chicago as represented in these structures compares well with cities in which decades were necessary to accomplish what was here done with inconceivable haste in two years. The older men of the profession, Boyington, Van Osdel, Wheelock, will all tell you that it was not infrequent that foundations were planned and constructed, even up to the level of the sidewalk, before the first and other stories were arranged, and one architect is responsible for the statement that in the rush of his work, one building of four stories was under roof before he "got around" to the design of its façades—the floors being supported at their outer lines by temporary stays.

At the time of the fire, the corps of men who had designed the old town were reinforced by the entrance of a number of men from other cities, especially in the East, who bore no small part of the burden of the day. But the major part was naturally carried by those living here in 1871, and with what steadfastness and enthusiasm no one not then here can ever know.

Older contractors and clients speak today with admiration of the energy, the mental clearness and decision with which, in those days, men like Van Osdel and Boyington carried forward the vast work committed to them, carried it to an extent far more personal than now; for all facilities — educated draughtsmen, superintendents and builders — now existing did not then exist.

Among these men, to whose integrity and ability so much is due, several are with us — some in active practice. Mr. Van Osdel does not now personally undertake much work; Mr. Carter, whom everybody loved, is gone where the materials used in architecture are more splendid than here; but Mr. Boyington and Mr. Wheelock, Colonel Shipman and Mr. Randolph, Mr. Cleaveland, Majors Willett and Jenney, Mr. Drake, Mr. Burling and others take their share of work in these new and less pressing days, and by their ability keep their younger confrères from too great vanity.

Mr. Boyington's career has been in every way remarkable. During all the years of his practice, young men have gone from his office all over the continent remembering him as friend and preceptor. He himself could scarcely realize the extent and variety of the work with which he has been identified. Many a design made under him, seen by him after years of separation, would be as unrecognizable to him as the long-unseen son of a Mormon elder to his papa. As a Nestor in the profession he stands today in one of the happiest positions attainable by men; in the evening of a long and honorable career. Among his works, perhaps the best is the Royal Insurance Building, which well expresses its commercial aim in its solidity, repose and dignity. The Board of Trade by him is not so fortunate. It seems to have been hastily done, and is scarred and defaced by what seems the touch of many inexperienced hands.

Mr. Van Osdel, in his earlier work, exhibited much warmth of imagination, in late years naturally tempered by age. From the Tremont House and the Reaper and McCormick blocks to the Brother Jonathan Building and Grace's Hotel there is shown something of this change. The Tremont House was, for its day, a most remarkable production.

Mr. Cleaveland achieved, some years back, a success equally great in the building in La Salle street, now occupied by the Merchants' National Bank, where he has employed with singular ability the "Neo-Grec" of the day.

Of Mr. Jenney it can in no sense be said (nor may it be said of several of the gentlemen above mentioned) that he is at the age when he asks concessions of the younger generation. The Portland Block by him was, in its day, the sensation of the town. It was never

finished by his original designs, the two upper stories being by other hands. Grace Church probably raises a smile to his face, as a touching souvenir of younger enthusiasm, which he would not now tolerate. Indeed, there may be a question now whether in such buildings as Mr. Leiter's, on Van Buren street, he has not too far put aside the earlier enthusiasm which still gave charm to the Home Building and Blair Lodge, in favor of a Puritan rigor which certainly does not warm the mind nor kindle the imagination.

Among the highest in all the profession stands Mr. Adler, for some time after the fire a partner of Mr. Burling, and the "designing" member of the firm.

Of late Mr. Adler has passed the artistic crayon to Mr. Sullivan, but work designed by him in earlier days — such as the building opposite the Tremont House, on Dearborn street, that at No. 97 Dearborn street, and Central Music Hall — show a strength, simplicity and straightforwardness, together with a certain refinement, which reveal the true architect. No professional man has pursued a more consistent and dignified course than he, and no man is more respected by his confrères. The Auditorium, a really wonderful building, stands as a monument to his and Sullivan's talent.

Treat & Foltz and Burnham & Root belong to the class imported shortly after the great fire. Mr. Treat was first associated with Mr. Randall, and for him designed the Union Park Congregational Church. Jointly Treat & Foltz have executed much creditable work, rising at times to a high rank, while they have always kept a dignified professional position. The new building on Madison street and Michigan boulevard is theirs, and the fine houses built on Prairie avenue near Twentieth street, for Mr. Moulton, and on the Northwest corner of Thirty-fourth street and Michigan boulevard, for Mr. Libby. The Martin Ryerson house, in Drexel boulevard, by them, is beyond all question one of the very best in town. This firm may perhaps be criticised for a too frequent use of cheap and unenduring material, and generally for occasional indifference to the expression in design of the stable and permanent qualities of building.

Burnham & Root, occupying a high position, have been very uneven in their work. Mr. Root, upon whom has largely devolved their designing, seems to have been too facile always to carefully reconsider his designs, and to have been to a large extent the victim of his own moods. Much work by Burnham & Root — the Phenix, the Insurance Exchange, the Rookery, Rand-McNally's and the Art Institute — is suggestive, and has borne its part in the architectural movement of the day, while much of it reveals crudities begotten of the haste or indifference of the hour. The position occupied by these gentlemen in connection with the Columbian Exposition gives them an opportunity for the welfare of the profession in America, the gravity of which it is hoped they will realize. It may be mentioned in passing, that the partnership between these two gentlemen seems to be admirably adjusted, Mr. Burnham adding to keen artistic perception remarkable executive ability.

S. S. Beman began his career under most favoring auspices. Endowed with fine talents and well equipped in his profession, he was intrusted with the erection of the town of Pullman. How well he carried this out is everywhere known; few things of the sort exist anywhere approximately as good. The Pullman Building is his, the Studebaker Building, the new Wisconsin Central Station with its charming tower, as well as many other successful and interesting structures. Mr. Beman's dwelling houses are often very clever. The weakest points in his designs seem to be a tendency to make his sky-lines too "fussy," and to indulge at times in a certain eccentricity of detail. Both of these qualities are shown in the Pullman Building, and the weak sky-line is the one serious detraction from the merit of the Studebaker Building.

Mr. Silsbee has also built many dwellings, especially of the suburban type, which are in the main thoroughly architectual and interesting.

Mr. Cobb came here from the East to erect the Union Club, which remains one of the most attractive ornaments of the North Side. In his hands also has been the Newberry Library, from which we anticipate so much. His influence for good has been very marked, especially in the great number of dwellings designed by him, whose great charm is their honesty, simplicity and refinement. The Owings Building is his, one of the interesting landmarks down town, in connection with which it is a pity that the north view of the roof is so marred by the necessary thrusting up of the northeast corner. Mr. Cobb has not chosen to employ many different styles for his work; and if it may be criticised it would be in the direction of a certain clumsiness, or lack of grace which it sometimes suggests, as witness, with all their beauty, the Tansill and Cable houses.

One of the most individual personalities, and the author of some of the most characteristic work, is Mr. Sullivan. Cultivated in many directions, with a bold, alert, vigorous and imaginative mind bending its energies into many channels, self-confident and enthusiastic, ideally supplementing Adler his partner, Sullivan has accomplished much admirable work, and will achieve much more. The Ryerson Building in Randolph street, on the river and Adams street, and on Adams street and Wabash avenue, are his; his are the designs for the Auditorium with its decorations, as well as many other buildings, all of which attest the boldness, freshness and ingenuity of his mind. So exuberant is he that he sometimes seems to neglect the larger questions of mass, of light and shade, of sky-blotch in his care for delicacy, beauty and significance of detail, and even in this respect at times forgets that this detail should assume different expressions when executed in different materials.

Holabird & Roche stand very high among their competitors, the Tacoma Building and many others bearing witness to their skill. It is seldom that one meets a professional man so modest, so unassuming and so able as Mr. Roche.

Whitehouse is identified with a large number of dwellings, almost without exception marked by breadth, refinement and home-like quality. The residences of Messieurs Higginbotham, Hutchinson, Cudahy, Yerkes, George Armour and Loomis are a few among many clever designs by him, and among churches St. Pauls in Prairie avenue is, in Chicago, almost unique amid the general paucity of well-designed churches. But of Mr. Whitehouse, no one who had seen certain dwellings of Richardson and McKim, Mead & White, could say that his mind was so self-centered as to be beyond external influence.

Mr. Clay has built a number of houses, showing extraordinary ingenuity and variety in both plans and designs. Spite of its blue girdle, the Partridge house in Prairie avenue, the Wilson and Fuller houses in Michigan avenue near Twenty-ninth street, the Hammer house in Grand boulevard, all show talent of high order, marred at times by too much fussiness and triviality.

Irving Pond and J. K. Cady are two most promising men of the younger class. If you have not seen Pond's Coonley house on the Lake Shore Drive and Division street, you should; it is every way delightful. Cady's work is always good in the sense of being imaginative, simple, refined and dignified.

The gentlemen mentioned above upon the whole confer honor upon the profession; alas, that there should be others of whom this may not be said!

"Unconscious assimilators" of the designs of others which reappear in distorted and mutilated form; worshipers of all the cheap, tin goods of architectural art; coarse and self-assertive in every line and mass of their work; constantly destroying by their monstrosities the beauty of whole streets, and making the end of vistas hideous nightmares, it is a comment upon the large charity of Chicago that they are suffered to exist.

Men like these, however, disgrace all professions, but despite them, the architectural profession in Chicago stands in ability and integrity well abreast of that in any other city, and of any other profession.

## Meeting of Board of Directors, American Institute of Architects.

THE first meeting of the Board of Directors of the American Institute of Architects for 1891, was held in the Welles Building, New York, January 3, President Hunt presiding, John W. Root secretary.

There were present fourteen members, as follows:

Richard M. Hunt, John W. Root, R. W. Gibson, Samuel A. Treat, William W. Carlin, Alfred Stone, Levi T. Scofield, Edward H. Kendall, O. P. Hatfield, Emlen T. Littell, J. H. Windrim, William M. Poindexter, D. Adler, George C. Mason, Jr.

The minutes of last meeting being read and approved, a large amount of business was transacted, the major portion being purely executive, and eliminated in this report.

The secretary was authorized to issue charters to the following Chapters: Rhode Island, Western Pennsylvania, Washington, Architectural Club of Cleveland, Missouri, Indianapolis, Philadelphia, New York, Boston, Wisconsin, Western New York, St. Louis, Buffalo, Illinois, Ohio, Michigan, Baltimore, Cincinnati.

Several other Chapters, those of Kansas City, San Francisco, Tacoma, Louisiana, Alabama, Texas, Georgia, either not having applied for charters or not having the required number of Fellows of the Institute (five) among their members, were passed till the next meeting of the directory.

Of the standing committees that upon a Code of Ethics is continued with no change; that upon Clerk of Works same as before, except the change from W. R. Forbush to James W. McLaughlin; that upon Uniform Contract same as before; that upon Education same as before, pending consultation with its chairman.

The Executive Committee of last year was reappointed.

A standing committee upon the Conservation of Public Buildings was appointed, to consist of the presidents of Chapters.

A committee of seven was appointed at the request of the Association of Fire Engineers, to meet a like committee of that body. The committee consists of Napoleon Le Brun, L. H. Sullivan, T. M. Clark, George C. Mason, Jr., Alfred Stone, George W. Rapp, W. W. Carlin.

It was announced by the secretary that the proceedings of the last convention, copies of the revised and amended constitution and by-laws, the Van Rensallaer paper, etc., would be distributed to members about the first of February.

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McCULLOUGH & STORCK, a new firm of architects in Chicago, have opened an office at 225 Dearborn street. Mr. Strock has practiced the profession for some time and Mr. McCullough has been for several years connected with the office of J. M. Van Osdel & Co.

J. H. MAHONEY, the sculptor, has opened a studio at Indianapolis and is doing important work there. He is at present engaged upon a statue of Henry Berg to surmount a large drinking fountain for animals, to be placed in front of the city hall at Milwaukee, the total cost of which will be $15,000. The statue will be cast in bronze, is heroic size, and will be in place and dedicated about May 1.

FREDERICK BAUMANN, of Chicago, deputy architect of the Indiana Soldiers' and Sailors' Monument, has submitted his annual report to the commission, in which he states that satisfactory progress is being made. He reports the lateral wind pressure to be 126,000 pounds balanced by the dead weight of the shaft of 1,800,000 pounds, and estimates the total pressure of the whole monument on the shaft proper to be 416 pounds to the square inch. Mr. Baumann speaks highly of the quality of the cut-stone work.

## Progress in Columbian Exposition Work.

THE full text of the report of the chief of construction and advisory board to the Committee on Buildings and Grounds, partially given in last issue, is as follows:

CHICAGO, December 6, 1890.

*To the Honorable the Committee on Grounds and Buildings, World's Columbian Exposition:*

GENTLEMEN,—Preliminary work in locating buildings, in determining their general areas and in other elementary directions necessary to proper progress in the design and erection of the structures of the Columbian Exposition has now reached a point where it becomes necessary to determine the method by which designs for these buildings shall be obtained.

We recognize that your action in the matter will be of great importance, not only in its direct effect upon the artistic and commercial success of the exposition, but scarcely less upon the aspect presented by America to the world, and also as a precedent for future procedure in the country by the government, by corporations and individuals.

In our advisory capacity, we wish to recommend such action to you as will be productive of the best results and will at the same time be in accord with the expressed sentiments of the architectural societies of America.

The following suggestions relate only to the central group of buildings in Jackson Park, it being the intention, from time to time, to designate other architects for the various important structures that are to be erected in addition thereto.

That these buildings should, in their designs, relationships and arrangement, be of the highest possible architectural merit is of importance scarcely less great than the variety, richness and comprehensiveness of the various displays within them. Such success is not so much dependent upon the expenditure of money as upon the expenditure of thought, knowledge and enthusiasm by men known to be in every way endowed with these qualities, and the results achieved by them will be the measure by which America, and especially Chicago, must expect to be judged by the world.

Several methods of procedure suggest themselves:

*First.* The selection of one man to whom the designing of the entire work should be intrusted.

*Second.* Competition made free to the whole architectural profession.

*Third.* Competition among a selected few.

*Fourth.* Direct selection.

The first method would possess some advantage in the coherent and logical result which would be obtained; but the objections are that time for the preparation of designs is so short that no one man could hope to do the subject justice, even were he broad enough to avoid, in work of such varied and colossal character, monotonous repetition of ideas. And again, such a method would evoke criticism, just or unjust, and would certainly debar the enterprise from the friendly coöperation of a diversity of talent, which can be secured only by bringing together the best architectural minds of our country.

*Second.* The second method named has been employed in France and other European countries with success, and it would probably result in the production of a certain number of plans possessing more or less merit and novelty.

But in such a competition much time, even now most valuable, would be wasted, and the result would be a mass of irrelevant and almost irreconcilable material, which would demand great and extended labor to bring into coherence.

It is greatly to be feared that from such a heterogeneous competition the best men of the profession would refrain; not only because the uncertainties involved in it are too great, and their time too valuable, but because the societies to which they almost universally belong have so strongly pronounced on its futility.

*Third.* A limited and fair competition would present fewer embarrassments, but even in this case the question of time is presented, and it is most unlikely that any result derived through this means coming as it would from necessarily partial acquaintance with the subject, and hasty, ill-considered presentation of it, could be satisfactory, and the selection of an individual would be open to the same objections made above, as to a single designer. Far better than any of the methods seems to be the last.

*Fourth.* This is to select a certain number of architects, choosing each man for such work as would be most nearly parallel with his best achievements. These architects to meet in conference, become masters of all the elements of the problems to be solved, and agree upon some general scheme of procedure. The preliminary studies resulting from this to be compared and freely discussed in a subsequent conference, and, with the assistance of such suggestions as your advisors might make, be brought into a harmonious whole.

The honor conferred upon those selected would create in their minds a disposition to place the artistic quality of their work in advance of the mere question of emolument; while the emulation begotten in a rivalry so dignified and friendly could not fail to be productive of a result which would stand before the world as the best fruit of American civilization.

(Signed) D. H. BURNHAM,
Chief of Construction.
JOHN W. ROOT,
Consulting Architect.
F. L. OLMSTED & Co.,
Consulting Landscape Architects.
A. GOTTLIEB,
Consulting Engineer.

In compliance with this report the Committee on Buildings and Grounds, upon the recommendation of Consulting Architect Root and Chief of Construction Burnham, on January 6, appointed ten firms of architects, as follows:

| | |
|---|---|
| Richard M. Hunt, | Adler & Sullivan, |
| Henry Ives Cobb, | George B. Post, |
| Van Brunt & Howe, | S. S. Beman, |
| W. L. B. Jenney, | McKim, Mead & White, |
| Burling & Whitehouse, | Peabody & Stearns. |

These architects assembled in Chicago on January 10, and on January 12 formed a bureau, with George B. Post as chairman and Louis H. Sullivan as secretary. On January 13 the following letter was sent to the Committee on Buildings and Grounds in response to their resolutions, through the chief of construction, he recommending its acceptance:

We state, in reply to your resolution, that the service to be rendered by us is as follows:

1. Attendance at a conference now in session, and at the second conference referred to in paragraph 4 of your resolution.

2. The preparation of preliminary studies to be submitted to said conference.

3. The preparation of one set of full and complete general working drawings of each building intrusted to our professional care, and of full details of all work of an artistic character connected therewith, also making such written description as may be necessary to elucidate fully our views as to the construction and treatment of said buildings. We are not, however, to make calculations of strength and stability, or to furnish detail drawings of structural design except to the extent these may be in any case intimately connected with the general artistic or economic aspects of the design. The engineer's solutions of the problem relating to design are to be submitted to us, and must in each case, as far as their relation to the artistic value of the buildings are concerned, meet the approval of the architects of the respective buildings before execution. In view of the fact that all problems of construction are to be solved by your own engineer, we are not to be held responsible for the structural stability of your buildings. But we are to give sufficient attention to the development and execution of our designs to assure ourselves and your committee that these designs are being carried out substantially in the spirit and on the lines contemplated.

The non-resident architects may, if they deem it necessary for the purpose of insuring certainty of execution of their designs in full accord with their intentions, make six additional visits each to the buildings under their charge, at such times as may seem to them most appropriate.

For the before mentioned services we are to be paid as follows:

*First.* All expenses of every kind incurred by us in making the drawings required, as also our necessary traveling expenses. Each of us shall keep an exact and regular account of all such expenses, which account up to the 25th day of each month shall be submitted to the chief of construction on or before the last day of said month and shall be paid before the 15th of the following month.

*Second.* The sum of $10,000 to each of the architects selected by you, payable as follows: $3,000 when the preliminary sketches are completed, $6,000 when all the drawings are completed, and $1,000 when the buildings shall have been completed.

In formulating these charges for our services we have given full consideration to the high and distinguished honor conferred upon us by your board, and believe that in fixing upon this scale of compensation we are not only dealing equitably and justly with ourselves, but, considering the circumstances and limitations of our employment, are acting in accordance with our general practice and with the usages of our profession. Respectfully submitted.

LOUIS H. SULLIVAN, Secretary. GEORGE B. POST, Chairman.

The acceptance of this report from the architectural bureau was recommended by Chief of Construction Burnham, and was instantly adopted unanimously.

The apportionment of the work next occupied the attention of the Committee on Buildings and Grounds, and the following general action was taken by the committee and the chief of construction in reference to the work:

*Resolved*, That the architects selected will be required in general —

*First.* To confer together with the chief of construction and his assistants in reference to the general grouping and arrangements of certain buildings for the purpose of eliciting any suggestions which may be of benefit.

*Second.* To suggest in general designs for various main structures, so that they may be in harmony with one another and of a desired high type of excellence.

*Third.* To furnish specific designs for different buildings, as they, or each of them, may be requested by the chief of construction.

*Fourth.* To make such suggestions, at a subsequent meeting, to be held at a time to be designated by the chief of construction, as may then seem necessary in view of the designs to be submitted.

The intention of the foregoing is to secure for the exposition management advice and services from architects in different portions of the country, with a view of presenting upon the exposition grounds types of architecture in every way suited to the requirements of the state of the art in this country.

The work was at this meeting also apportioned to the ten architects appointed in response to the following resolution:

*Resolved*, That the chief of construction be authorized to notify the ten architects selected of their appointment, and to assign to them individual buildings and notify them of such assignment at his discretion.

The work was therefore apportioned to the architects, each with a view to his special fitness for the work. Architects Hunt, Post and McKim, Mead & White, of New York, Peabody & Stearns, of Boston, and Van Brunt & Howe, of Kansas City, were given a group of five buildings to work out as one scheme. These buildings include a central building for manufactures and liberal arts, covering twenty-two and one-half acres; the agricultural, covering nine and one-half acres; machinery, covering eleven and one-half acres; electricity, covering six acres, and administration buildings. Of the five Chicago architects, Adler & Sullivan will design the transportation building, covering seven acres; S. S. Beman, mines, covering six acres; Henry Ives Cobb, fisheries, covering three acres; W. L. B. Jenney, horticultural, covering eight and one-half acres; Burling & Whitehouse, entrances.

Architects Adler & Sullivan were appointed to design the temple of music, but pending an uncertainty that it will be built they have been apportioned other important work.

This appointment and apportionment leaves yet many large buildings and groups and many scattered smaller buildings and features, which will undoubtedly be very soon assigned, and probably entirely among Chicago architects not already recognized but known to be equal to any of those selected. The chief of construction found it extremely difficult to draw a line where he felt none existed, but he has pursued that course deemed most wise at this juncture to expedite business and push the work with dispatch. The active designing will now go rapidly forward, and meantime the grounds at Jackson Park are being prepared for reception of buildings.

The bureau of architects sent to the Committee on Buildings and Grounds, upon adjournment, January 16, the following communication:

The commission has been embarrassed by want of definite information with regard to the exact requirements of space for the exhibits under each department of the classification, and it cannot learn that any specific facts have been or can be gained to establish exact dimensions for the various buildings.

The commission is therefore of the opinion that the buildings should be reduced in size to the smallest estimate of possible requirements, and that such provisions should be made for their extension as may become necessary by the construction of additions of comparatively economical character, and that these additions should be provided for in the original design as parts of each building rather than as separate annex structures. The commission is of the opinion that this system will avoid unnecessary expenses in the outset, or the ultimate construction of architectural deformities.

In the opinion of the commission the plan which they have the honor to submit herewith shows that arrangement of buildings in relation to each other and to the grounds which will best serve as a final arrangement and as a basis for the design for the separate buildings.

It is considered by the commission to be a matter of vital importance that there be constructed no important buildings south of Sixtieth street and that the island should be free from all buildings used for exhibition purposes.

In the opinion of the commission the device of inter-communication by means of waterways not only forms a very original and beautiful feature of the general design, but will prove of great practical value.

The commission is of the opinion that great additional interest will be added to the exposition if the exhibit of marine transportation is removed from the building for general transportation and located as indicated on the plat.

The commission recommends the construction, at the intersection of the main pier in the lake and the breakwater pier, of a structure several open docks in height, which may serve as a refreshment saloon, and also serve to give a bird's-eye view of the grounds and buildings on the line of one of the main axes of the design.

No attempt has been made to establish the exact size of any one of the buildings, but the plan submitted is intended to show a scheme by which their size may be made practically elastic.

The commission desires to state that its members have spent a considerable amount of time, individually and collectively, in roughly laying out different schemes for general arrangements of Jackson Park for the proposed exposition, and that, with the modifications of detail which it now proposes, it believes that

the plan submitted to them for consideration forms a perfect solution of the problem.

The commission desires to call your attention to the fact that until a definite scheme is adopted and until the exact dimensions of the various buildings are fixed by the proper authorities, its members cannot even make preliminary sketches for the work assigned to them.

In conclusion, the commission desires to express its satisfaction with the present condition and prospects of the World's Columbian Exposition, the wisdom of the general arrangements as far as they have come under its consideration, and its confidence in the success of the undertaking.

LOUIS H. SULLIVAN, Secretary. GEORGE B. POST, Chairman.

The committee decided to let contracts for dredging and filling Jackson Park in accordance with the plan. New bids will have to be called for, and when they are in work will immediately begin.

## National Association of Builders.

THE approaching fifth annual convention of the National Association of Builders, which will be held in New York February 9, 10, 11, 12, has been fully arranged for by Secretary Sayward and the Executive Committee, circulars having been issued containing special information preparatory thereto.

The Chicago Builders' and Traders' Exchange appointed a special committee on transportation to arrange for those attending the National Convention of Builders. After these were perfected the following special circular was issued, and concerns not only those who propose attending from Chicago, but all exchanges west of that point and those east upon the line of the Michigan Central Railroad. A time-table is also attached.

The next annual meeting of the National Association of Builders will be held at Masonic Hall, on Twenty-third street, in New York, February 9 to 13, for which occasion the Michigan Central—"The Niagara Falls Route"—will make a rate of one fare and one-third for the round trip, on the certificate plan, i. e., you pay $20 Chicago to New York and receive a certificate which will enable you to purchase a return ticket at $6.75.

The cost of sleeping-car berth each way will be $5.

These rates will apply to delegates, members of their families, or friends who desire to accompany them.

The Chicago delegation from the Chicago Builders' and Traders' Exchange, after a careful consideration of the advantages offered by the various lines, have selected the Michigan Central and will start from Chicago on their "North Shore Limited Express," leaving at 12.20 noon, Saturday, February 7, which train is due to arrive in New York, at the Grand Central depot, at 4 o'clock the next afternoon.

The service on this train is unsurpassed, it being a solid vestibule train equipped with buffet, library, dining and sleeping cars, and in fact, every convenience that the most exacting traveler could wish, thus insuring us a most enjoyable trip.

Delegates from western cities are cordially invited to come to Chicago to join the Chicago delegation.

A postal card is inclosed herewith addressed to Mr. L. D. Heusner, passenger and ticket agent, Michigan Central Railroad, on which please state if you will join us to go on that train; also please give the number of persons in your party, so that sufficient sleeping-car accommodations may be reserved.

Certificates to enable you to secure the reduced rates will also be sent to you.

While the committee are very anxious to have you join them and go on this train, it might be well to state that the tickets at this rate will also be accepted on any of the other trains of the Michigan Central and New York Central & Hudson River railroads, as shown in the time-table below.

Awaiting your early reply,

M. B. MADDEN,
WM. GOLDIE,
ROBT. C. VIERLING.
Trans. Com. Chicago Builders' and Traders' Exchange.

| MICHIGAN CENTRAL AND NEW YORK CENTRAL & HUDSON RIVER. | No. 20. North Shore Limited. | No. 6. New Yk. Vestib. | No. 10. Fast Atlantic Express. | No. 12. New Yk. and Bost. Express. |
|---|---|---|---|---|
| Lv. CHICAGO, Lake Street | *12:20 pm | * 3:10 pm | *10:10 pm | § 9:25 pm |
| Lv. Chicago, 22d Street | 12:28 pm | 3:18 pm | 10:18 pm | 9:33 pm |
| Lv. Kalamazoo | 4:00 pm | 7:04 pm | 3:35 am | 2:17 am |
| Lv. Battle Creek | 4:30 pm | 7:37 pm | 4:29 am | 3:04 am |
| Lv. Jackson | 5:38 pm | 8:52 pm | 6:25 am | 4:45 am |
| Ar. Detroit | 7:30 pm | 10:45 pm | 9:20 am | 7:30 am |
| Lv. Detroit | * 7:40 pm | 10:55 pm | 9:50 am | †12:30 pm |
| Ar. St. Thomas | 10:55 pm | 2:00 am | 12:45 pm | 4:00 pm |
| Ar. Falls View | ..... | 5:57 am | 4:37 pm | ..... |
| Ar. Niagara Falls, N. Y. | 3:30 am | 6:40 am | 5:20 pm | 9:05 pm |
| Ar. Buffalo | 4:10 am | 7:25 am | 5:55 pm | 9:30 pm |
| Ar. Rochester, via N. Y. C. & H. R. | * 6:00 am | * 9:55 am | * 8:10 pm | *12:25 am |
| Ar. Syracuse | 8:00 am | 12:15 pm | 10:10 pm | 2:30 am |
| Ar. Utica | 9:37 am | 2:05 pm | 11:54 pm | 4:10 am |
| Ar. Albany | 12:00 m | 4:50 pm | 2:30 am | 6:40 am |
| Ar. NEW YORK, Grand Cent. Depot | 4:00 pm | 8:50 pm | 7:00 am | 10:55 am |

Eastern time shown for points east of St. Thomas. *Daily. †Except Sunday. §Except Saturday.

## "Sugar Mortar."

OCCASIONAL notices have appeared in the technical press of experimental tests of lime mortar to which small quantities of sugar have been added, with the result of largely increasing its tenacity and hardness. Recipes are also given for adding molasses and iron filings to lime mortar for the same purposes. Neither method seems to have come into general use, however, perhaps from inadvertence or from some practical difficulty not encountered by the experimenters. The Vienna *Bau Industrie Zeitung* mentions the process with approval, stating that it gives to common lime mortar a strength superior to that of cement. It says there is no novelty about it, as it has been practiced in India for hundreds of years with the best possible success. The fortifications of Madras, built near the close of the eighteenth century, were laid in mortar mixed with cane sugar, which mortar acquired a hardness and strength equaling that of the rock itself. The removal of portions of this masonry in 1859 was attended with the utmost difficulty and large expense, it being almost impossible to separate the mortar from the rock even by the most violent explosives. The solidity of the celebrated Cunham walls in Madras is also credited to the "sugar mortar." In the recent construction of the Museum of Natural History in Berlin highly satisfactory experiments were made with such mortar, it proving equal to the best cement. Molasses was also tried in a similar manner but without perceptible advantage.

## Our Illustrations.

Portrait (photogravure) of the late John Wellborn Root.

Wholesale Store Building, Minneapolis, Minn. L. S. Buffington, architect.

Palm House and Conservatory, Lincoln Park, Chicago. J. L. Silsbee, architect.

Court House for Wayne County, Indiana. Jas. W. McLaughlin, architect, Cincinnati, O.

Residence for Mr. F. D. Turner, Rogers Park, Ill. W. L. B. Jenney, architect, Chicago.

Wainwright Office Building, St. Louis, Mo. Adler & Sullivan, Chicago, and Chas. K. Ramsey, St. Louis, associated architects.

Seattle Opera House Building, Seattle, Washington. Adler & Sullivan, architects, Chicago. Perspective view and floor plans are shown.

Rochester Architectural Sketch Club Competition for a brick and terra-cotta clock tower for a railway station; first place, R. A. Greenfield; second place, W. H. Barnes.

Cincinnati Architectural Club Competition for a wrought iron bracket lamp; first and fifth places, John Zettel; second place, David Davis; third place, Bernard Wisenall; fourth place, Arthur Stedman.

PHOTOGRAVURE PLATES.

(*Issued only to subscribers for the Photogravure edition.*)

Stable building, Edgewater, Ill. J. L. Silsbee, architect, Chicago.

Evanston Club House, Evanston, Ill. Holabird & Roche, architects, Chicago.

City Library, Cambridge, Mass. Van Brunt & Howe, architects, Boston and Kansas City, Mo.

Building for Scroll & Key Society, New Haven, Conn. Richard M. Hunt, architect, New York.

Building for Southern New England Telephone Co., New Haven, Conn. L. W. Robinson, architect.

Residence of Mr. James Mullen, Kenwood, Chicago, Ill. Irving K. Pond and Allen B. Pond, architects.

Fowler Hall of McCormick Theological Seminary, Chicago. A. Page Brown, architect, New York City.

## Association Notes.

CHICAGO REAL ESTATE BOARD.

The annual election of the Chicago Real Estate Board took place January 13. All the vacant offices were filled. The result of the election was as follows:

President, Josiah L. Lombard; vice-president, Edwin F. Getchell; treasurer, Samuel E. Gross; secretary, Robert P. Walker.

Executive Committee—Wyllys W. Baird, two years; Byron A Baldwin, F. A. Henshaw (holding over).

Membership Committee—D. M. Erskine, Jr., two years; L. J. Swift, J. V. Hair. W. F. Lubeke, Dunlap Smith, J. H. Trumbull, Wm. P. Harrison, C. W. Pierce, V. H. Surghnor (holding over).

Reference Committee—M. R. Barnard, two years; A. B. Meade, John B. Knight (holding over).

Valuation Committee—Joseph Donnersberger, Eugene H. Fishburn, Willis G. Jackson, George M. Bogue (holding over), Frank R. Chandler (holding over).

Call Board Committee—Nelson Thomasson, two years; C. L. Bonney, F. M. Elliott, Charles E. Rand, C. L. Hammond (holding over).

Public Service Committee—South Side, William R. Kerr, B. R. De Young; North Side, E. S. Dreyer, two years; James L. Houghteling; West Side, John Wain, A. J. Stone, George Birkoff Jr.

CHICAGO BUILDERS' AND TRADERS' EXCHANGE.

A special meeting of the exchange was held on December 12 to nominate and elect delegates to the fifth annual convention of the National Association of Builders, which will be held in New York February 9, 10, 11 and 12. For the first time in this exchange delegates were nominated upon the floor, and the result was that the names of over sixty candidates were proposed, and in the balloting but seven similar ballots were cast. The following is the result:

Delegate at large, George C. Prussing.

Delegates—W. P. Ketchum, George Tapper, Joseph Downey, John Rowle, W. H. Alsip, C. W. Gindele, M. B. Madden, R. Vierling, F. E. Spooner, William Goldie, D. V. Purington, P. B. Wight.

Alternates—George A. Fuller, H. Martin, C. B. Kimbell, John Angus, C. C. Bishop, W. M. Crilley, J. B. Simpson, E. H. Humprey, J. G. McCarthy, D. Freeman, E. Kirk, Jr., W. G. Oliver.

ST. LOUIS MECHANICS' EXCHANGE.

The annual meeting of the Mechanics' Exchange of St. Louis was held January 13 for the purpose of electing delegates to the national convention and to nominate officers for the ensuing year. The principal business discussed before the election of delegates was upon a resolution presented by Henry Feurbach instructing the delegates to advocate the reduction of the three dollar per capita tax of the national association to one dollar. This was opposed by Mr. Anthony Ittner (second vice president of the national association) and others and was finally lost by an almost unanimous vote.

Messrs. Ittner and Delegate-at-Large Kelly were elected by ballot by the secretary to represent the exchange, and subsequently five other

delegates were elected — Messrs. J. B. Legg, William Anderson, W. A. Rutter, W. J. Baker, P. Mulcahy. No alternates were elected.

Mr. J. N. Daues made a statement that the Missouri measurement law as now on the statute books contradicted itself, and therefore moved that a committee composed of a bricklayer, painter, stonemason and plasterer be appointed. The following gentlemen were then named: J. H. Daues, Stephen O'Connor, Daniel Cavanaugh, James S. Dowling and P. Mulcahy. These gentlemen were instructed to visit Jefferson City and seek to secure the proper legislation.

## Obituary.

On January 7, the well known hardwood lumber dealer, Mr. Charles H. Hayden, died in Chicago, after many years of active business life, in which honesty, integrity and sound business principles and judgment made him respected and loved.

At a special meeting of the Chicago Hardwood Dealers' Association the following resolutions of respect and regret were passed:

The members of the Chicago Hardwood Lumber Dealers' Association received the announcement of the death of Cbarles H. Hayden with profound sorrow, deepened by the suddenness with whicb he, one of their most active and appreciated associates, has been called to swell the large list of those gone before.

His many years of active life in the lumber trade in this city brought him in contact with all of us, making his loss more keenly felt by each, added to the pain and sorrow of seeing one more vacancy made in our ranks.

Possessed of unbounded energy, ambition and honesty, conscientious and prompt in all business matters, he was, as a business man, a success, wbich these qualities command, and his death has cut short a career that must have been a pattern for young men as the legitimate results of honesty, integrity and sound business principles faithfully applied.

A large number of friends will feel the loss keenly in that social circle of which he was so important a factor.

To bis family, to whom be was so deeply devoted, his fellow members of the Chicago Hardwood Lumber Dealers' Association offer their heartfelt sympathy, in their loss of a faithful husband and a true father, unsparing of bimself, with loyalty and fidelity to every tie and duty.

*Resolved*, That these resolutions be spread upon the minutes of the Chicago Hardwood Lumber Dealers' Association, and a copy sent to the family of our deceased brother, and to the press of tbis city.

GEORGE E. WHITE, President.
E. E. HOOPER, Secretary.

Suitable resolutions were also passed by the Chicago Lumberman's Exchange.

## Personal.

COPE & STEWARDSON, architects, of Philadelphia, have removed to 320 Walnut street.

CHARLES D. STICKNEY, formerly of Philadelphia and favorably known in Milwaukee and Chicago, has opened an office in Evansville, Indiana.

RICKON & THOMPSON, architects and civil engineers, of Little Rock, Arkansas, are sending a neatly designed souvenir to their friends announcing their copartnership.

ARCHITECTS BAUER & HILL, of Chicago, have removed from the offices they have so long occupied at 94 La Salle street to the Marine Building on the northeast corner of Lake and La Salle streets.

BEERS, CLAY & DUTTON is now the style of a new firm of Chicago architects formed by the consolidation of the offices of the well-known architects, Myron L. Beers and W. W. Clay, Mr. Dutton having for the past year been connected with the latter firm under the style of Clay & Dutton. If Mr. Beers has a specialty it is schoolhouses, if Mr. Clay, it is residences, and Mr. Dutton is a designer of exceptional ability, the combination making a strong firm.

ARCHITECTS TREAT & FOLTZ, of Chicago, have removed to the Fairbanks Building, southwest corner of Randolph street and Wabash avenue. As this firm have occupied offices at 80 Dearborn street for so many years and the building to which they removed is a new office building, Mr. Treat is sending his friends a sketch of that portion of the city, showing the location of prominent buildings such as the city hall, and the old offices of the firm and that of the new.

FROM January 1, 1891, the Chicago Hydraulic Press Brick Company becomes successors to Messrs. Lockwood & Kimbell for the sale of St. Louis, Collinsville, Findlay pressed brick, and all lines heretofore handled by them. The active management of the company will be in the hands of Messrs. S. S. Kimbell, general manager, and J. J. Lockwood, assistant secretary and treasurer, and the same prompt attention will be given to customers in the future as they have received in the past from the retiring firm.

## Building Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, Ill., January 10, 1891.

Business people are apprehensive of a continued stringency in money. Commercial failures last year were two and one-half times greater than for the previous year. The volume of business as represented by bank clearings foots up over sixty thousand million dollars. The production of crude and manufactured products last year was considerably in excess of the year 1889. Enormous investments were made throughout the year in all directions and in all avenues, but the recent stringency has arrested the fever in that direction for the time being. Money is being tied up and bidden for the present lest the stringency should become deeper and more general, but the business interests generally believe that congress will recognize the necessity of taking whatever steps can be taken to improve the financial situation. A country doing a business of sixty thousand million dollars is presumably in need of a greater volume of currency than when its volume of business is one-half that amount. Manufacturers everywhere are resuming operations after the holidays with a fair amount of work. Buyers are pursuing a very conservative course, believing that existing productive capacity is fully able to protect them against an advance. The advancing tendency in prices which recently manifested itself will not probably continue, but rather decline because of the evident purpose of manufacturers to crowd production. Lumber, coal, iron, steel machinery of all kinds and building material of every character has been run down to a rather low ebb by the extraordinary demand which was kept up all through the past year. Present indications point to great activity in the early spring. In the first place, there is no accumulation of stocks; then prices are low. An enormous amount of new work is projected. Railroad companies will do much new work. House and mill and shop building will be entered upon with zeal unless something of an unusual character develops itself. The masses of the people have been busily employed at good wages, and there is no reason for anticipating any other condition. All sections of the country are prosperous. The South bas been making steady advances. The West is filling up with a thrifty people. Railroads are contributing their share to the great work of interior development. The car and locomotive and ship, boat and general machinery builders are all busy. In fact, there is no statistical reason for anticipating any decline in activity in any branch of industrial activity. House building has not been overdone, nor will be as long as there are good conditions among the manufacturing and farming interests. The country is strong politically and financially, and the people are maintaining a close and intelligent supervision over their public servants. Labor agitations are not seriously threatened, except among coal miners. Wages have been declining here and there, and it is probable further reductions will be made at the opening of spring in several branches of industry. The country has made permanent gains during 1890, and every indication points to a healthy growth during the current year.

## Synopsis of Building News.

**Baltimore, Md.**—The Fidelity & Deposit Company are considering plans for their new office building to cost about $300,000. The company intend to make their building one of the finest in Baltimore and second to none in the country. It will be eight stories high and equipped with all modern conveniences.

The St. Mary's Seminary Committee are having plans prepared for a six-story brick addition to their building.

**Chicago, Ill.**—Architect E. H. Turnock has completed plans for two three-story residences to be erected on Forty-fifth street and Vincennes Avenue. They will have fronts of buff Bedford stone; hardwood interiors, furnaces and all the improvements, and cost $13,000.

Architect Frederick W. Perkins: For M. Donnelly, a three-story stone front residence, to have hardwood interior, furnace, stained, plate and beveled glass, etc.; cost $10,000; to be erected on Woodlawn Avenue near Fifty-first street.

Architect George Grussing is making plans for six two-story flat buildings to have Tiffany pressed brick and Bedford stone fronts, bathrooms, closets, mantels, stained glass, electric bells, speaking tubes, etc. They will cost $18,000 and will be built on Troy street near Chicago avenue. He is also taking bids on three two-story flat buildings of Tiffany pressed brick and stone, to have all the improvements and cost $12,000, to be built on Sacramento avenue near Lake street.

Architect F. L. Fry: For Wm. Thomas, finished plans for a four-story flat building 33 by 72 feet, to cost $16,000, to have a rock-faced stone front, hardwood finish, all the sanitary and modern improvements. It will be erected on Calumet avenue and Twenty-fourth street.

Architect W. L. Carroll: For Hugh R. Ross, a two-story residence, stone basement, frame, hot water heating, etc., to be built at 17 & 19 Hinman street, Evanston.

Architect J. L. Merriam: For Fred B. Clark, a two-story store and flat building, corner of Cypress and Kendal streets, of pressed brick, stone and galvanized iron, bathrooms, closets, mantels, etc., cost $20,000.

Architects I. K. & A. B. Pond: For the Chicago City Missionary Society, a chapel 46 by 103 feet, to be built on Ewing street, near Halsted; to be of pressed brick and stone, with slate roof, pine finish, stained glass windows, furnace, and chairs to accommodate six hundred people.

Architect F. R. Schock: For Frank Johnson, at Austin, making plans for a two-story basement and attic frame, stone basement residence, to have stained glass and all the improvements. For W. S. Gould he is planning a two-story basement and attic residence; to be of frame and bowlders, have steam heat, hardwood finish, stained, plate and beveled glass, etc.; to be erected at Riverside. For Charles Wolf, at Elgin, a two-story basement and attic frame and stone basement residence. For S. W. Chapman, at Elgin, a two-story basement and attic frame, and bowlders, furnace, bathrooms, closets, mantels, stained glass, etc.; making plans. For M. Reiman, on Drexel boulevard near Forty-third street, taking figures on a two-story basement and attic residence, to have a blue Bedford stone front, hot water heating, hardwood interior, and the best of sanitary and modern improvements; the cost will be about $18,000.

Architects McCullough & Strock: For Vernon Lee, a two-story flat building, 44 by 60 feet, to be built on Sixty-first street, Englewood. The front will be of St. Louis obsidian brown pressed brick, with Bedford stone trimmings; they will put in stained glass and all the sanitary improvements.

Architect O. W. Marble: For himself, a three-story residence on Grand boulevard south of Forty-third street. It will have a handsome buff Bedford stone front with carved ornamentation, hardwood interior, hot water heating, electric light, gas fixtures, consols and sideboards, cement floor in basement, etc.; cost, $15,000. The same architect is working on plans for a four-story and basement apartment house, 100 by 100 feet in size, to be erected on the South Side. It will have a stone front of very handsome design in the French Renaissance style of architecture. It will be finished in hardwood throughout, have marble wainscoting and stairs, mosaic and tiled floors, steam heat, electric light, elevators, stained, plate and beveled glass, and the best of modern sanitary arrangements; the cost will be upward of $150,000.

Architects G. Bloedner & Co.: For William Clusman, a two-story flat building of brownstone and pressed brick, to be built at 444 South Paulina street. For H. Rudolph, on West End boulevard and Nineteenth street, eight two-story flat buildings, of pressed brick and stone, and all the modern improvements; to cost $33,000.

Architect J. H. Huber: For M. Marks, making plans for a three-story store flat and hall building, 25 by 105 feet in size, to be erected at 3030 State street. It will have a stone and iron front, stained and plate glass, hardwood finish, elegant lodge and banqueting rooms, etc.

Arcbitects J. M. Van Osdell & Co.: For Robert Law, a four-story warehouse, 80 by 100 feet; to be built on the river front and Market street; it will be of common brick, mill construction and have freight elevator, steam heat, etc., and cost $10,000.

Architects Bettinghofer & Hermann: For Rev. Pirmin Koumly at Nemaha County, Kansas, planning a Catholic church, 60 by 130 feet, with square tower 160 feet high.

Architect A. Druiding: For East Saginaw, Michigan, a Catholic cburch to cost $18,000. For Glencoe, Minnesota, a church to cost $25,000. For Jersey City, New Jersey, making plans for a large Catholic church. For St. Andrews Cathedral, Little Rock, Arkansas, a two-story school building.

Architect C. L. Stiles: For B. B. Boecker, at Naperville, Illinois, just finished plans for remodeling residence; will put in hot water heating, hardwood finish, slate roof, etc. For James Howe, on Harrison street, near Centre avenue, a buff Bedford stone front, four-story store and flat building; all the modern improvements will be put in. He has also just finished sketches for the Magnolia Inn to be erected at Mobile Bay, about thirty miles from Mobile, Alabama; it will be 40 by 126 feet, two stories high, all finished in Georgia pine; the first floor will have a dining room 40 by 48 feet in size, parlors, billiard room and office. A main feature of the Inn will be immense verandas extending round the building and facing the bay. The heating will consist of old-fashioned fireplaces about eight feet wide in red pressed brick or terra-cotta. In addition to this, they will

build a dozen or more small cottages for the use of the guests. They will put in all the modern conveniences, and it will be used as a winter resort. He is making plans for two residences to be built at Ridgeland for Thomas Frost, Jr.; they will be of frame with stone basements, have furnaces and the modern improvements. For Harry Mills at La Grange he made plans for a two-story frame residence 40 by 60 feet in size; to have stone basement, hot water heating, hardwood interior and all the improvements.

Architect C. M. Palmer: For Potter Palmer, a block of five four-story residences to be erected corner of Chestnut and Pine streets; they will have handsome fronts of stone with stone bays and French mansard roofs; the interiors will be finished in mahogany, oak and birch; mosaic floors in vestibules, steam heat and the best of sanitary and modern improvements; they will cost $80,000; he is working on plans. The same architect made plans for a two-story basement and attic frame residence to be erected on Wolfram street for Alfred Hirsch. Architect Palmer is also working on plans for the four-story armory for the Chicago Hussars; it will be 100 by 231 feet in size, and be constructed of pressed brick and brownstone and have steam heat, electric light and all the modern improvements. A main feature is a very spacious riding gallery 100 by 160 feet in size; there will also be an assembly hall 60 by 100 feet with opera chairs to seat 500 people. The stable will have accommodations for one hundred horses. Work will not be commenced until spring.

Architect Julius Speyer is making plans for a three-story club house, 100 by 100 feet in size, to be erected at Montrose for the Montrose Club; the first floor will contain six stores, office, store rooms and boiler rooms; on the floor above there will be library, reading room, ladies' and gents' parlors, billiard room, smoking room, dining room 50 feet in length, etc.; above, society hall, 98 by 50 feet. The interior will be finished in sycamore, oak, birch and cherry. They will put in steam heat, electric light, speaking tubes, electric bells, tiled floors, four billiard tables and all the improvements; the cost will be about $70,000.

Architect L. B. Dixon is making plans for a block of five-story flats to have a frontage of 252 feet on Lake avenue near Thirty-ninth street. The front will be of pressed brick and stone with brick bays and terra-cotta; cornice he will put in bathrooms, closets, mantels, speaking tubes, electric bells, stained, plate and beveled glass, hardwood interior finish, marble wainscoting, tiled floors, cement floors in basement, gas ranges and logs in fireplaces, steam heat, electric light, etc.; the cost will be $100,000.

Architects Snyder & Nothnagel: For Wm. A. Bayor, making plans for a block of six modern three-story and basement flat buildings, 124 feet front by 99 deep, to be erected on the northwest corner of Thirty-seventh street and Vernon avenue. The basement will be of rockfaced buff Bedford stone and above of St. Louis pressed and ornamental brick and stone with galvanized iron bay windows. They will put in bathrooms, closets, mantels, stained and plate glass, open plumbing, electric bells, speaking tubes, tiled floors and wainscoting, sideboards, fuel gas fireplaces and ranges, etc.; the cost will be $60,000.

Architect J. E. Scheller made plans for a seven-story office building, to cost $100,000, to be built at 142 to 148 W. Madison street. He will put in steam heat, electric light, etc.

Architect H. B. Wheelock: For Mrs. J. Holmes a three-story store and flat building on the northwest corner of Fifty-ninth and State streets, to be of Bedford stone front, have marble wainscoting, tiled floors, stained and plate glass, etc.; cost $40,000. He is also working on plans for a ten-story apartment house, 72 by 128 feet, to be built on the South Side. The front will be of brown brick, stone and terra-cotta, will put in three elevators, steam heat, electric light, etc.; the cost will be about $400,000.

**Cincinnati, Ohio.**—Reported by Lawrence Mendenhall:

When the January number of the INLAND ARCHITECT appears, bringing pleasure to its readers, all the leaves in that wonderful book called "Good Resolutions" will have been turned over, and the book itself laid away again until another season. Why these resolutions are not kept, in the form of good morals, honorable business and honest work, the offenders themselves can answer. There should be as much honor shown in living up to specifications in building by contractors as in carrying out the command "Thou shalt not steal," if not more so. Imperfect construction considers life, while money can be replaced. Architects owe it to their clients to insist upon first-class work by first-class workmen. They also owe it to themselves to have their ideas carried out by their clients, and not allow the latter to sway them for the sake of saving a few dollars. If the client has not enough confidence in his architect, he had better not build at all.

The easiest way to do in order to avoid trouble is, I think, to tell the architect within $500, the price house you want. Tell him you want the very best for such a price, and then allow the above amount, or more if you can afford it, for good plumbing, fireproofing, cement floors in the cellar, as the case may be. Careful superintendence should cut a prominent part in an architectural career, and if an architect cannot devote the necessary time, a competent assistant should. When both client and architect recognize this fact, mutual satisfaction will result.

The total value (as given by the contractors) of building improvements in the city limits for the year is $4,310,701, divided as follows:

| | | | |
|---|---|---|---|
| Brick and stone buildings, | 442 | ..... | $2,877,417 |
| Wood and frame | " 562 | ..... | 944,196 |
| Alterations, | " 1,091 | ..... | 384,393 |
| Moved | " 33 | ..... | 4,695 |

If the true value was given the amount would be nearly $6,000,000, and if the suburbs really belonging to our city were included, the amount would reach $9,000,000. This is a fair computation, and the only equitable comparison to make with other cities, for our suburbs are the places where our city is crowding.

W. W. Franklin reports as follows: For Mr. Joseph Taylor (care of architect) a residence; materials, pressed brick and stone; slate roof, pine finish, wood mantels, stained glass, etc.; cost $7,000.

M. Rumbaugh reports: For Mrs. Mary Perin, Seventh street near Elm, a store building; materials, brick, stone, iron; steam heat and elevators, bells, tin roof, gas, plumbing, etc.; cost $50,000.

A. O. Elzner reports: For Dr. Sigmund Stark, a residence; materials, brick, stone; furnaces, stained glass, hardwood finish, mantels, gas, plumbing, etc.; cost $7,500. For Dr. Max Thorner, a residence; materials, brick; furnace, plate and stained glass, grates, hardwood finish, wood mantels, gas, plumbing, etc.; cost $8,000. For Dr. Alfred Springer, a residence; materials, brick, stone; furnace, grates, mantels, hardwood finish, slate roof, stained glass, etc.; cost $14,000.

Des Jardins & Hayward report: For Mr. J. H. Rhodes, a lake cottage; materials, frame; plate glass, stained glass, galvanized iron, shingle roof, hardwood finish, mantels, plumbing, etc.; cost $1,500.

J. J. Kueckert reports: For Mr. George Jung, a residence; materials, brick, stone trimmings; furnace, stained glass, slate roof, grates, hardwood finish, etc.; cost $7,500.

G. W. Drach reports: For a syndicate, a number of houses to be erected in Clifton, Ohio; materials, brick, stone, galvanized iron; stained glass, slate roof, grates, terra cotta, etc.; cost $55,000.

J. W. McLaughlin reports: For Mrs. Alfred Allen, a flat building; materials, brick; plate glass, elevators, heating, dumb waiters, gas, plumbing, etc.; cost not known.

George Vogel reports: For Mr. J. G. Krebs, at Newport, Kentucky, a residence; materials, brick; furnaces, grates, hardwood finish, mantels, plumbing, gas, etc.; cost $6,500. For Mr. Clarence Davidson, a residence; materials, brick; furnace, stained glass, bells, slate roof, grates, etc.; cost $7,000.

G. & A. Brink report: For Anchor Carriage Co., a factory building, size 40 by 78, four stories high; materials, brick; iron shutters, steam heat, skylights, plumbing, etc.; cost $6,000.

Theodore Richter, Jr., reports: Plans for an addition to the Cincinnati House of Refuge. Write to him for further particulars.

John H. Boll reports: For Mr. C. H. Bennett, of the Bennett & Peck Furnace Company, a residence; materials, brick; slate roof, furnace, stained glass, hardwood finish and mantels, gas, plumbing, etc.; cost $8,000.

S. Hannaford & Sons report as follows: For G. N. Stone, Esq., manager Bell Telephone Co., a residence; materials, stone; slate roof, hardwood finish, stained glass, electric bells, hardwood floors, plumbing, gas fixtures, etc.; cost $25,000. For F. H. Alms, care of Alms & Doepke Co., an apartment house; materials, pressed brick and stone; elevators, dumb waiters, pine finish, gas, plumbing, plate glass, mantels, steam heat, etc. For A. De Serisy, a residence; materials, brick, stone; furnace, stained glass, dumb waiters, mantels, gas, etc.; cost $10,000. For Mrs. Frank J. Jones (Little Miami R. R.), a residence; materials, brick, stone; furnace, stained glass, hardwood finish, mantels, gas, plumbing, etc.; cost $8,000.

**Cleveland, Ohio.**—Architect F. Felkel: For Manns Brown, a two-story frame store and dwelling, size 33 by 34 feet; cost $3,000. For the Lake Erie Iron Company, a one-story shop, size 50 by 160 feet; cost $5,000.

Architect John Eisenman: For G. C. Julier, a two-story bakery, size 114 by 55 feet; cost $5,000; McMillen & Collister, builders.

Architect S. R. Badgley: For A. W. Johnston, a two-story frame dwelling, size 18 by 46; cost $7,000. Also for Messrs. Adams & Todd, two two-story frame dwellings, size 29 by 31 feet; cost $6,000; Hodges Bros., contractors.

Architect E. Schwabe: For W. C. Langman, a two-story dwelling, size 15 by 30 feet; cost $5,000.

Jno. T. Watterson will erect a one-story foundry for the Riverside Foundry Company, size 34 by 133 feet; cost $6,000.

| | | | | | | |
|---|---|---|---|---|---|---|
| 6 | Brick and stone, new permits issued in December | | | | | $14,070 |
| 154 | Wood and frame, | " | " | " | " | 175,265 |
| 83 | Alterations, | " | " | " | " | 14,710 |
| 243 | Total, | " | " | " | " | $204,045 |
| 117 | Brick and stone, new permits issued for the year | | | | | $1,365,141 |
| 2729 | Wood and frame, | " | " | " | " | 2,962,264 |
| 1444 | Alterations, | " | " | " | " | 780,702 |
| 4290 | Total, | " | " | " | " | $5,108,107 |

**Colorado Springs, Colo.**—Architects Lee & Boel, of Denver, have secured the commission for preparing designs for the new high school. It is to be of St. Louis pressed brick and American brown stone, the warming and ventilation will be as perfect as skill can design; cost to be about $100,000. The building to be the most complete high school in America.

**Denver, Colo.**—It is proposed to build a town hall in South Denver. Plans are being prepared for a building to cost about $25,000. Also a large hotel building is being planned to be erected in Brunlow Park.

Architects Lee & Boel are preparing plans for the following: A brick residence for Mr. Collins; to cost $10,500. For Mr. Shackelford a brick and stone residence, hardwood, etc.; to cost $5,000; also a residence for Mr. Geo. Z. Boel "colonial"; cost $4,800; and four dwellings for the Colorado Building & Contracting Company; cost from $3,000 to $5,000.

**Detroit, Mich.**—Building is rather dull, but the architects are busy preparing plans for the opening season, which promises to be unusually brisk.

During the past year 2,625 new buildings have been erected at a cost of $4,942,605.00, and 626 additions cost $441,875.00, making a total cost of $5,584,480.00 for the year.

Architects A. C. Varney & Co.: For Thomas Kennedy, a four-story store and flat block, pressed brick and stone trimmings; cost $14,000. For Moses I. Schloss, a two-story residence, brick and stone trimmings, slate roof; cost $10,000.

Architects Malcombson & Higgenbotham: For John Fine, a two-story residence, brick, stone trimmings, slate roof, size 30 by 57 feet; cost $7,000. For F. Demane, a two-story frame residence, size 28 by 50 feet; cost $5,000. Also for Jacob Klein, a two-story frame hotel, at Grosse Pointe, Mich.; to have a front of 150 feet; cost $8,000. For Herman Freund, a two-story brick stable; to cost $5,000.

Architects Van Leyen & Hackett: For the Estey Manufacturing Company, Owosso, Mich., a three-story manufacturing building, size 360 by 80 feet, brick and frame; cost $50,000.

Architects E. A. Walsh & Son: For Dr. J. Black, a two-story frame dwelling, size 28 by 56 feet; cost $6,500.

Architect George Depew: For William C. Lautner, a two-story residence, brick and stone trimmings, size 30 by 54 feet; cost $6,500.

Architect Peter Dedericks: For A. Posselius, a two-story brick residence; to cost $4,500.

Messrs. D. McDonnell & Co., builders, are erecting a frame hall, size 42 by 70 feet; cost $5,500.

Architect Joseph E. Mills: For the Weir Memorial M. E. Society, at Salem, Ind., a brick and stone church, size 45 by 70 feet; cost $9,000. Also for S. Altman, at Rochester, Ind., a two-story brick residence; cost $6,000.

**Helena, Mont.**—Architect Frank E. Read: For Dr. J. J. Leiser and R. Lockey, a three-story and basement building for stores and offices, brick with pressed brick front, 40 feet front and 65 feet deep; cost $15,000. Dougherty & Co., builders.

**Pittsburgh, Pa.**—Architect James P. Bailey: For J. W. Flowers, a Methodist church, brick with slate roof, to cost $10,000.

No other city during the year has made such remarkable improvement in architecture as the Pittsburgh of 1890, possessing as it now does such fine business houses, and surrounded by beautiful homes. There were during the year 1890 erected about 3,141 new buildings, at an estimated cost of $6,391,018, and an average cost of $2,035. Although this shows that the number of buildings is not more than in 1889, still the style and character of the buildings are much superior.

Among the new buildings proposed to go up in the spring is a Medical Office Building, exclusively for doctors. Plans are now being considered. It is to be six stories, and to cost about $100,000.

**Rochester, N. Y.**—Architect Otto Block has associated with him in partnership Mr. W. H. Barnes, and the firm hereafter will be known as Otto Block and W. H. Barnes. Mr. Barnes has for several years been foreman in Mr. Block's office.

Mr. Stern, of Rogers, Sturges & Stern, architects, has entered into partnership with the Messrs. Thomas and E. B. Nolan. The firm will hereafter be known as Nolan Brothers & Stern.

Architects Block & Barnes are preparing for G. W. & F. B. Crouch a block of frame flats to contain one store and ten apartments, to cost $15,000.

Architects Jay Fay and O. W. Dryer are designing for C. A. Widener, Esq., a frame residence to cost $6,500. The very best plumbing will be used.

Architect J. Foster Kelly is making alterations in the old Orion Hall. When complete it will be five stories high and contain fifteen apartments, one story being added to cost $11,000.

**Salt Lake City, Utah.**—Architect R. Kletting: Board of Trade Bldg., five stories, stone front, to be completed with all modern appliances; cost $60,000; under way. For P. L. Williams, a three-story residence, pressed brick and stone; cost $12,000.

Architects Carroll & Kern: For M. H. Walker, a terrace of seven three-story dwellings, pressed brick and stone, with all modern conveniences; to cost $60,000. Also for the Walker estate, remodeling the old burnt opera house for store and office building; cost $35,000. Architect D. J. Keiller: For a syndicate composed of local and eastern men, a four-story brick warehouse, with all necessary auxiliary buildings and plant for producing sugar from beets, location near Nephi, Utah Territory; to cost $200,000; work commenced. They are also preparing plans for Mr. F. Groesbeck for a six-story store and office building.

Mr. J. L. McCornick is having plans drawn out for a six-story stone bank and office building; architects, Mendelssohn, Fisher & Laurie, Omaha, Nebraska.

A new opera house will be erected at an early date to replace the one burned down some months ago. The stock for the building has all been subscribed for and its erection is assured; architect, J. M. Wood, of Chicago and San Francisco.

Architects Dallas & Hedges: For city, two engine houses, brick and stone, with the most modern devices for such buildings; cost $10,000 each; under way. Also two two-story residences, combination brick, stone and frame, to cost $7,000 each; under way.

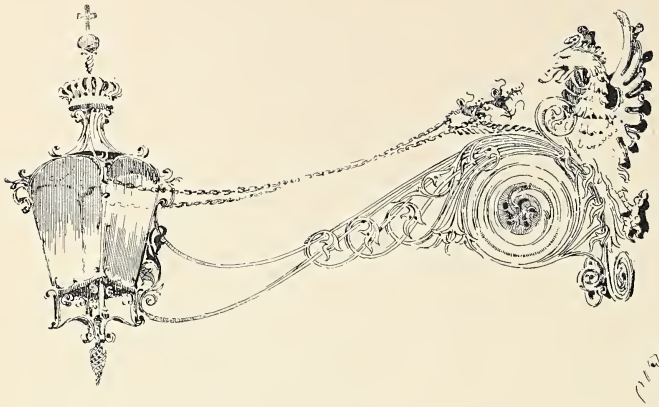
**St. Louis, Mo.**—The Wainwright Company will erect an office building to cost about $15,000. The Missouri Pacific Railway Company will erect a $30,000 store and office block, to be two stories, brick and stone.

Messrs. L. Saylor & Co., for the St. Louis Public School Company, a two-story brick public school.



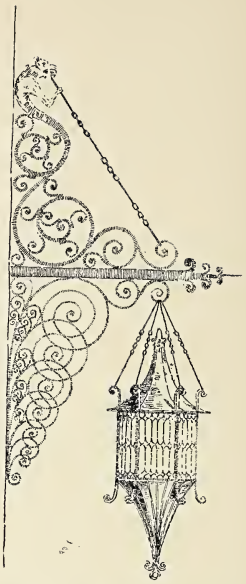
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John W. Root

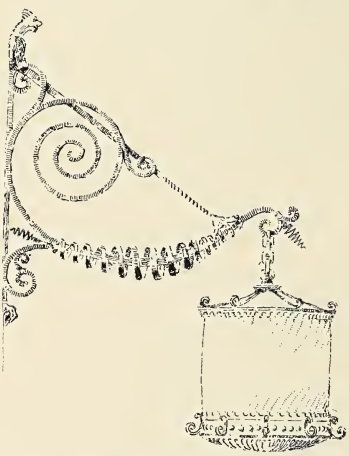




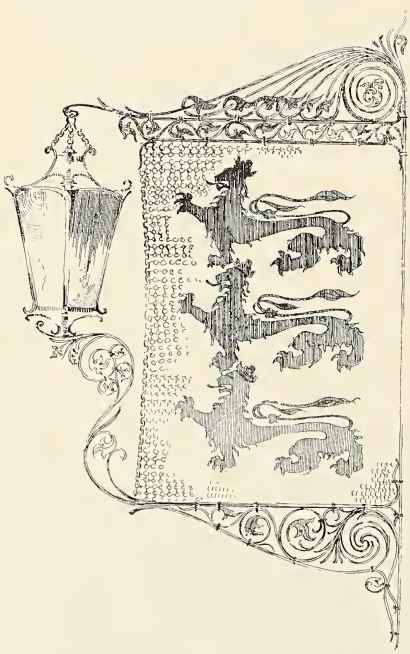

FIRST PLACE—JOHN ZETTEL.



THIRD PLACE—BERNARD WISENALL.

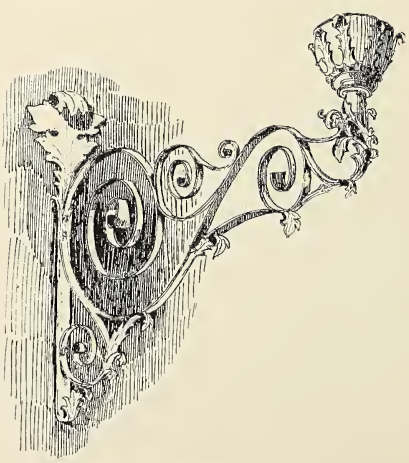


FOURTH PLACE—ARTHUR STEDMAN.



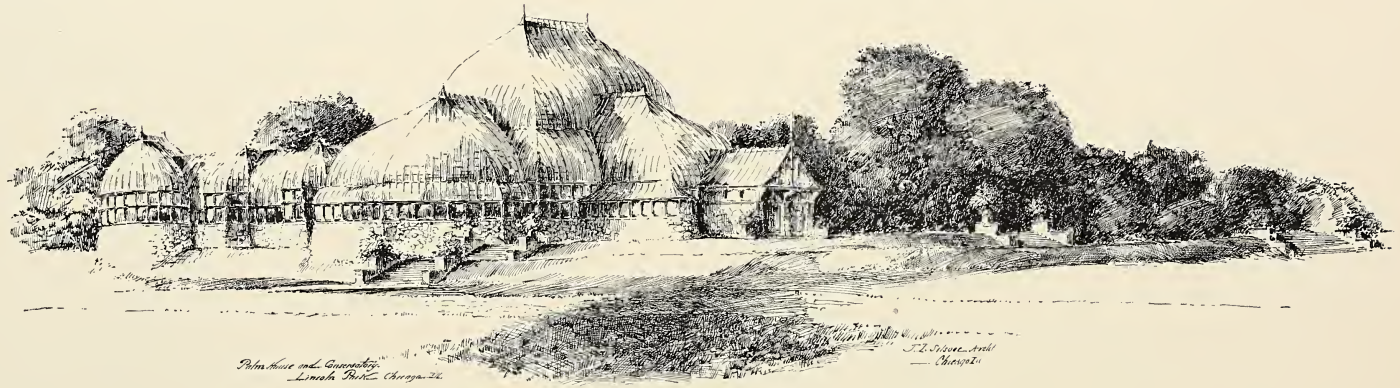


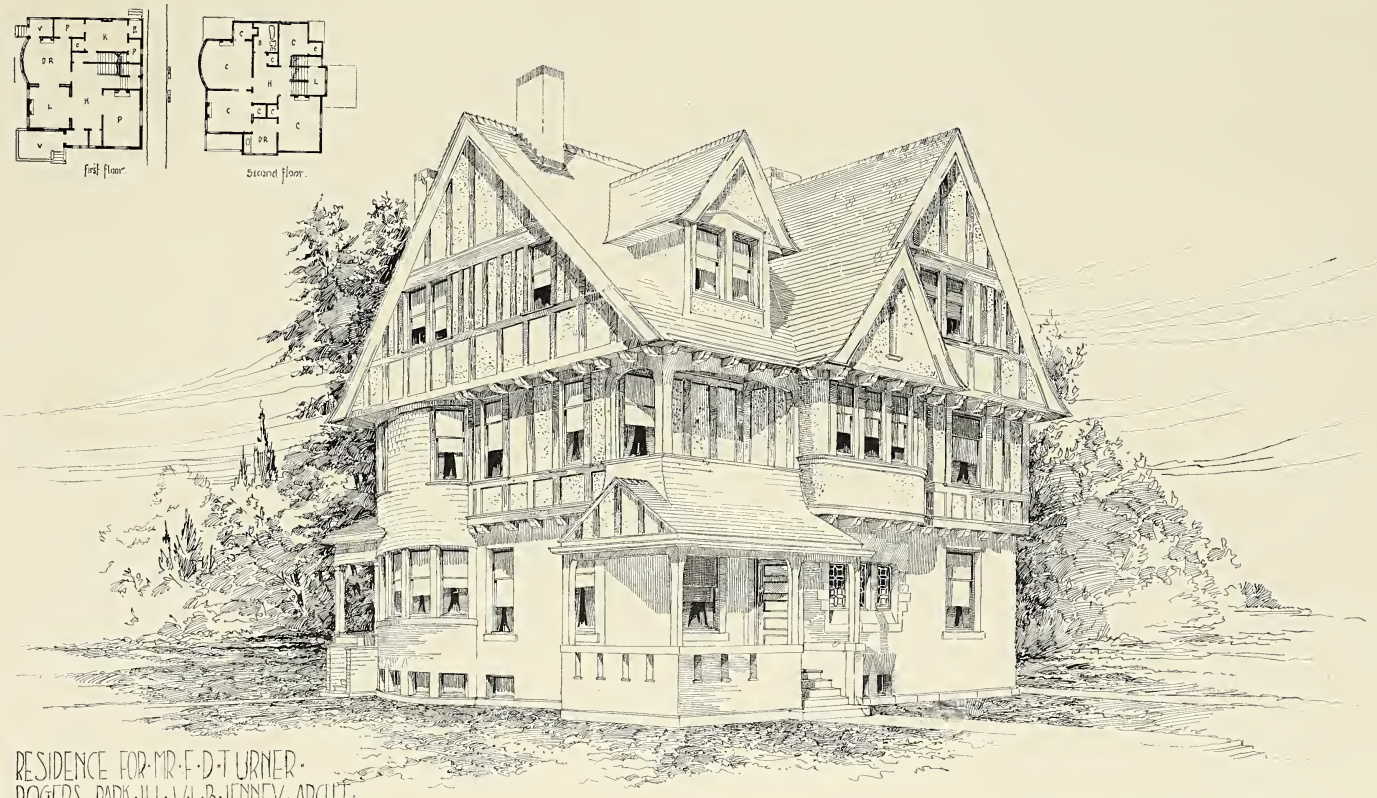

FIFTH PLACE—JOHN ZETTEL.



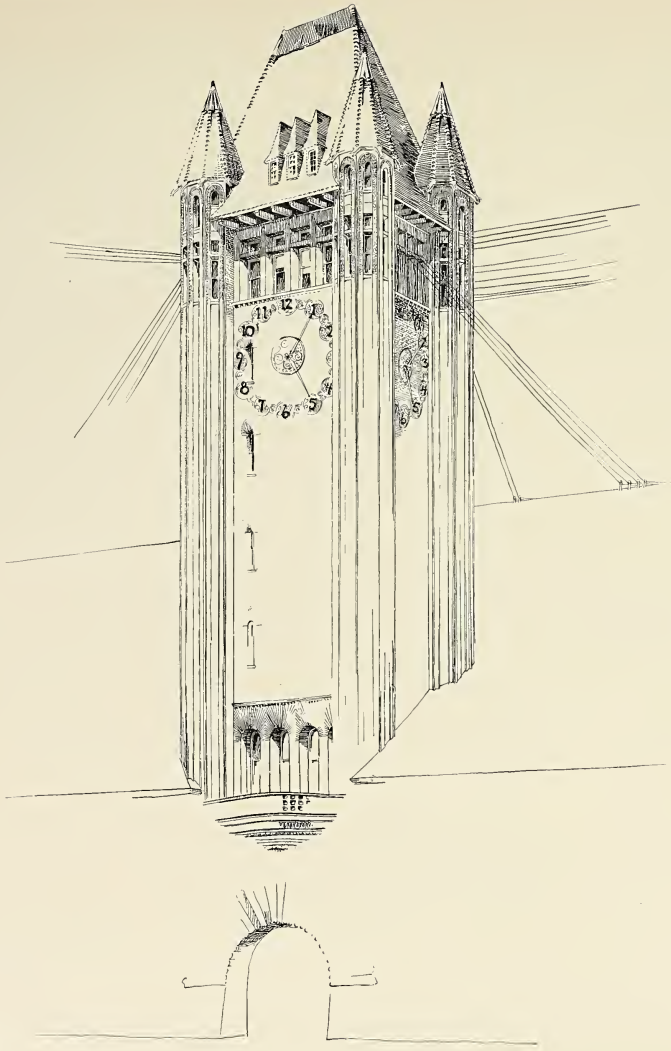
SECOND PLACE—DAVID DAVIS.

CINCINNATI ARCHITECTURAL CLUB COMPETITION FOR A WROUGHT-IRON BRACKET LAMP.

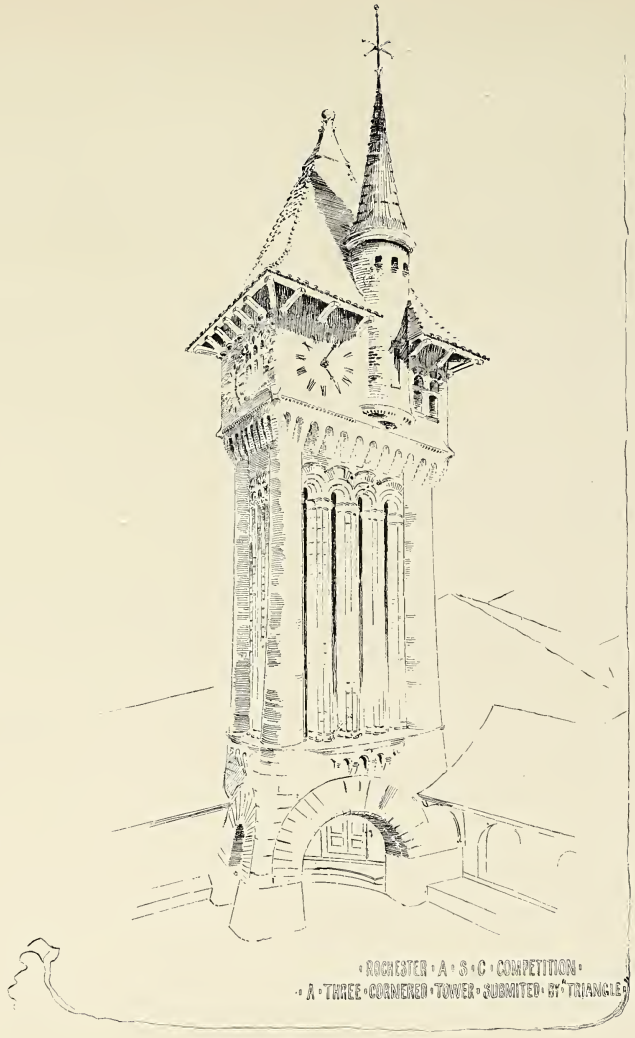

Palm House and Conservatory
Lincoln Park Chicago Ill.
J. L. Silsbee Archt
Chicago Ill.




RESIDENCE FOR MR F D TURNER
ROGERS PARK ILL WL B JENNEY ARCHT

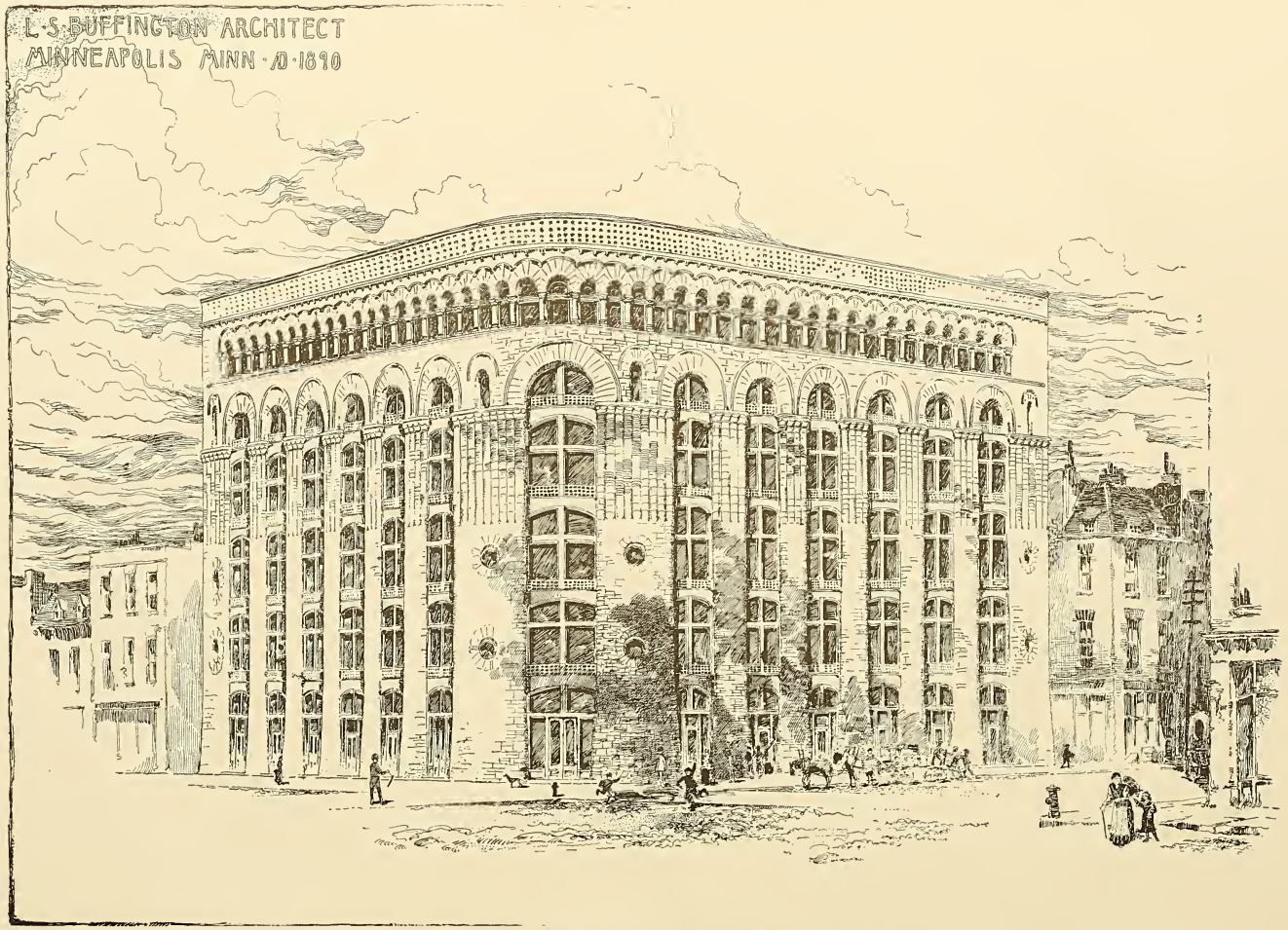


FIRST PLACE—R. A. GREENFIELD.



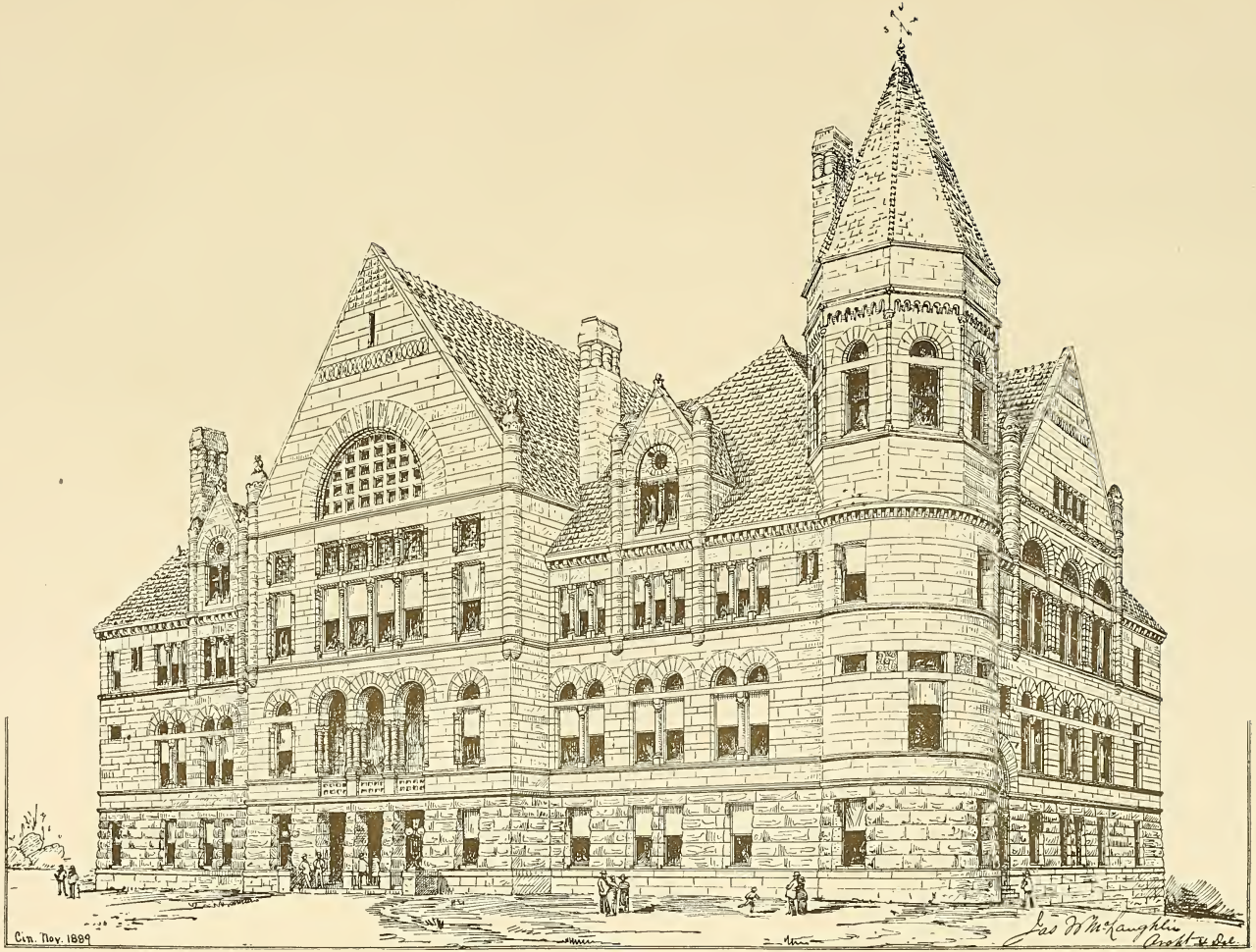

SECOND PLACE—W. H. BARNES.

ROCHESTER ARCHITECTURAL SKETCH CLUB COMPETITION, BRICK AND TERRA-COTTA CLOCK TOWER FOR RAILWAY STATION.



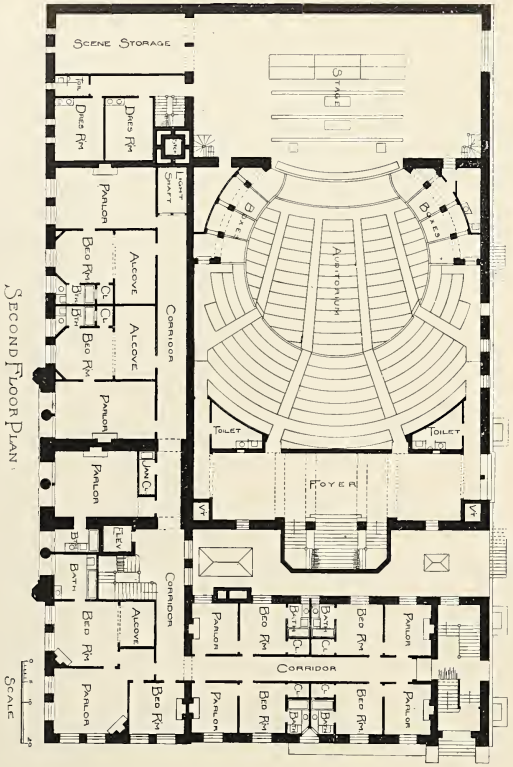

WHOLESALE STORE BUILDING, MINNEAPOLIS, MINN.

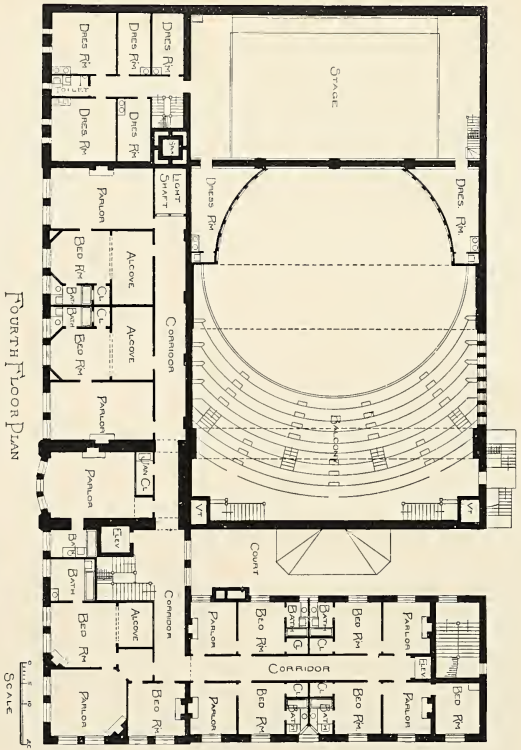
L. S. BUFFINGTON, ARCHITECT.

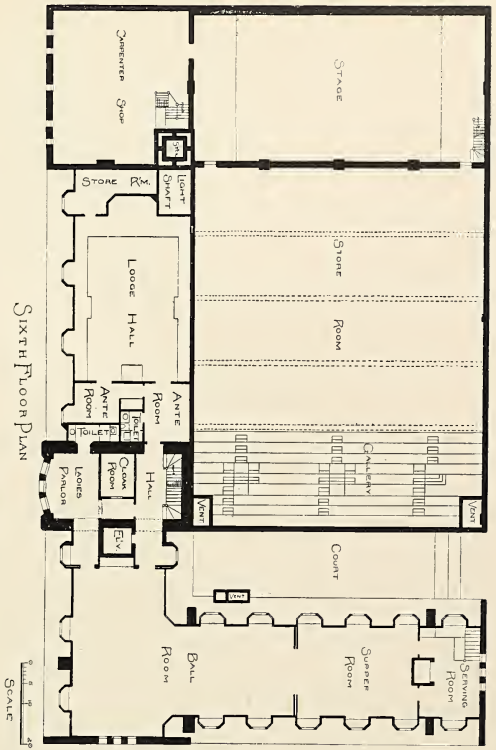



COURT HOUSE FOR WAYNE COUNTY, INDIANA.

Jas. W. McLaughlin, Architect, Cincinnati, Ohio.



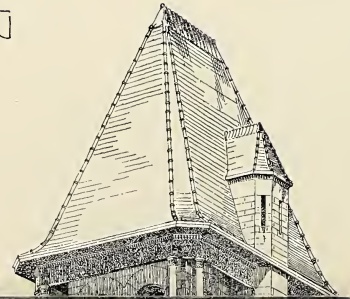



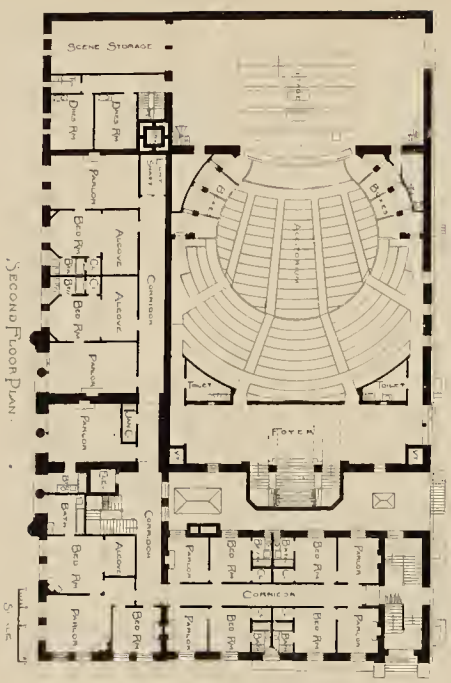

# SEATTLE OPERA HOUSE BUILDING

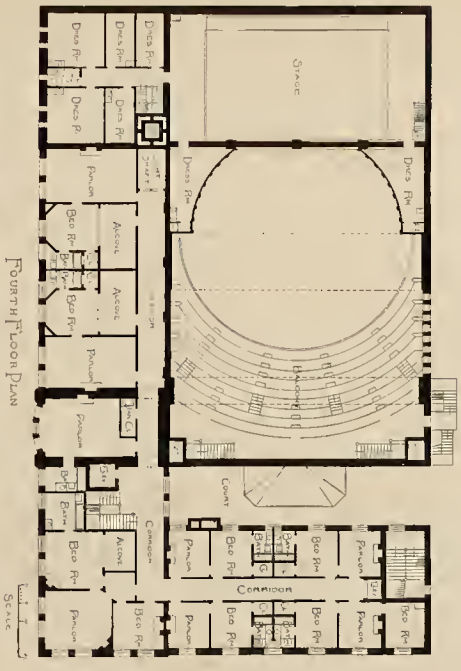
## SEATTLE. WASHINGTON

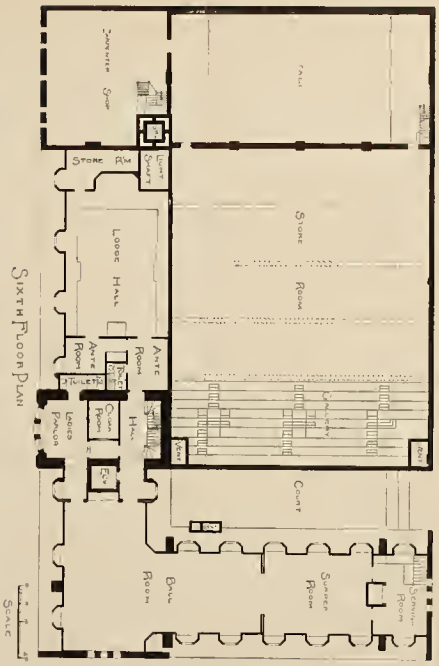
ADLER AND SULLIVAN. ARCHITECTS
CHICAGO ILLS








# SEATTLE OPERA HOUSE BUILDING

## SEATTLE. WASHINGTON

ADLER AND SULLIVAN. ARCHITECTS
CHICAGO ILLS



# WAINWRIGHT BUILDING.

## ST LOUIS MO

ADLER AND SULLIVAN CHICAGO
CHAS K RAMSEY ST LOUIS } ASSOCIATED ARCHITECTS





# WAINWRIGHT BUILDING.

ST LOUIS MO

ADLER AND SULLIVAN CHICAGO
CHAS K FRAMSEY ST LOUIS } ASSOCIATED ARCHITECTS



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